

JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION

PRACTICAL PHARMACY EDITION

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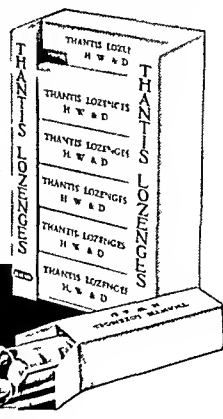
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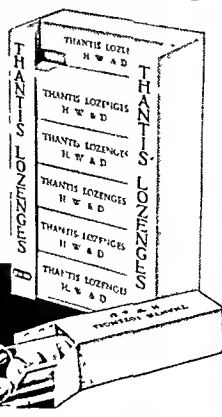
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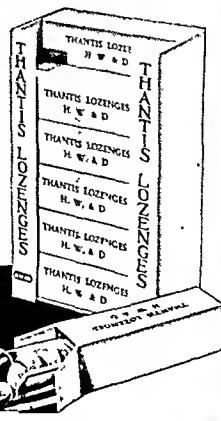
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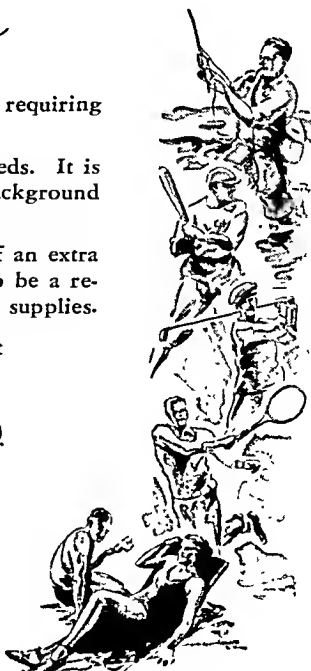


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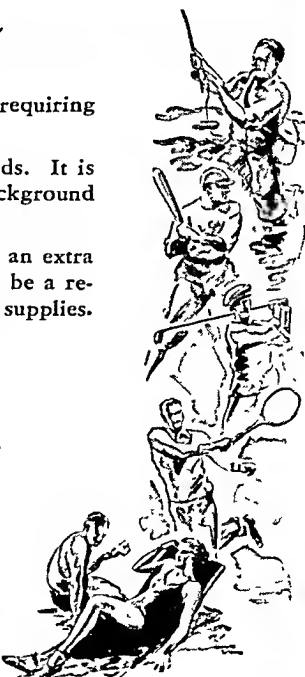
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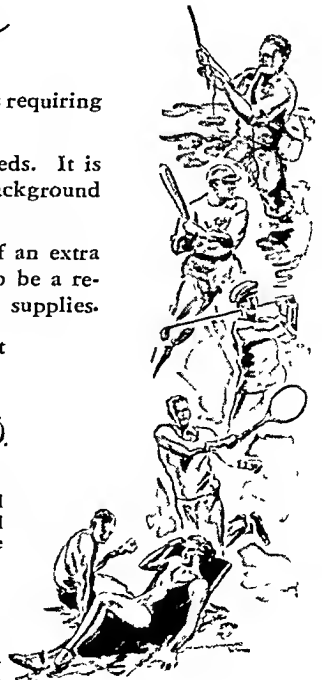


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The Remington Honor Medal will be awarded to Dr. R. L. Swain by the New York Branch of the A. Ph. A., at a dinner in the Pennsylvania Hotel, New York City, Thursday Evening, November 28, 1940

Journal of the American Pharmaceutical Association

Practical Pharmacy Edition

2215 Constitution Ave., Washington, D. C.

E. F. KELLY, *Editor*

ROBERT P. FISCHELIS, *Associate Editor*

Vol. 1, No. 11

NOVEMBER 1940

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NEW LAWS

Thirty-nine States will have sessions of their respective legislatures in 1941. Most of these sessions begin in January. Read the suggestions for legislative activity on Pages 395 and 399

Journal of the American Pharmaceutical Association

Practical Pharmacy Edition

2215 Constitution Ave., Washington, D. C.

Committee on Publications

Chairman, A. G. DuMez; R. P. Fischelis; Roy B. Cook;
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E. F. KELLY, *Editor*

ROBERT P. FISCHELIS, *Associate Editor*

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DECEMBER 1940

Consecutive No. 24

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THE SEASON'S GREETINGS

The Editors of this Journal and the officers of the American Pharmaceutical Association wish every reader a very happy and prosperous New Year. May 1941 bring to our profession a full measure of the recognition which its public health services deserve.

American Pharmaceutical Association Officers Elect



H. A. WHITNEY

H. A. K. Whitney, First Vice-President-Elect, was born November 7, 1894, Adrian, Mich. He graduated from the local High School in 1912. During the World War he served his country and entered the University of Michigan College of Pharmacy thereafter, receiving his Ph.C. degree in 1923. In 1925 he entered the Pharmacy Department of University Hospital and was appointed Chief Pharmacist in 1927.

Mr. Whitney has served as president of the Michigan Board of Pharmacy, past-chairman of the Section on Practical Pharmacy and Dispensing, is now president of the Michigan Branch of the A. Ph. A., chairman of the Sub-Section on Hospital Pharmacy, member of the Committee on National Formulary and chairman Sub-Committee on External Preparations. He is N. A. B. P. representative on the Committee on Pharmaceutical Syllabus; has served in the past on committees such as: Study of Pharmacy, Weights and Measures, Council on Pharmaceutical Practice, etc. He is a member of the Rho Chi, Rotary, etc., and published the "University Hospital Formulary."

In 1923 Mr. Whitney married Hildreth Katherine Wheeler and two children grace their home, Joan Elise and Kim, Jr.



HENRY H. GREGG, JR.

Henry H. Gregg, Jr., Second Vice-President-Elect, was born in Purcellville, Va., May 24, 1899. His family moved to Minnesota in 1900. Since both father and grandfather were pharmacists it was most natural that he should follow the profession also, and after finishing school in 1922 he entered business with his father in Minneapolis.

Mr. Gregg was local secretary for the Minneapolis pharmacists in 1927-1928, at which time he saw the need of greater cooperation between physicians and pharmacists and was instrumental in organizing the Hennipin County Interprofessional Committee, and for the last eleven years has been chairman of that local committee as well as the chairman of a state committee of pharmacists working together with a group from the State Medical Society.

He presented a very interesting paper on "Inter-professional Relations" at the Toronto meeting of the A. Ph. A. in 1932, has contributed other papers and addresses on the subject, and is looked upon as a leader in this movement.

Since 1929 Mr. Gregg has been owner of a semi-professional type of pharmacy at 4954 France Ave., is married and has three children, Betty, Nancy and David.



CHARLES HALL EVANS

Charles Hall Evans, President-Elect of the A. PH. A., was born December 15, 1895, at Norwood, Ga., the son of William T. and Mary Hall Evans. He received his early education in the public schools and Warrenton High School. In 1915 he graduated in Pharmacy from Mercer University, Macon, Ga., and is a member of Eta Chapter, Sigma Nu and the Alembic (Science) Club. After graduation he entered the pharmacy of his father and was admitted to partnership in the three stores operated by the firm in Warrenton, Norwood and Harlem; after the death of his father, in 1926, he became sole owner; he is now operating two pharmacies in Warrenton.

Mr. Evans has been a member of the Georgia State Board of Pharmacy since 1928; from 1932 to 1934 he served as vice-president and chairman of District No. 7 and in 1934 was elected president of the National Association of Boards of Pharmacy. He was chairman of the Georgia Board of Pharmacy when the college prerequisite amendment was enacted, and was chairman of the Legal Committee of Georgia Pharmaceutical Association in charge of

a revision of the pharmacy law for presentation to the 1935 session of the Legislature. He served as a member of the Board of Directors of Georgia Pharmaceutical Association, member of the Executive Committee N. A. B. P., as chairman of the Fair Trade Division of Georgia since the passage of their Fair Trade Act, as chairman of the Legislative Committee the past few years, and at the last Session they passed a bill placing all drug activities under the Board of Pharmacy instead of the Commissioner of Agriculture, thereby creating a Department of Pharmacy.

Mr. Evans takes an active interest in civic affairs and is a past-president of Warrenton Chamber of Commerce, is chairman of the Board of Education of Warrenton public schools and of a number of other various local organizations. He is a member of the Warrenton Methodist Church, a steward, trustee and the treasurer.

On February 6, 1917, Mr. Evans married Miss Sarah Rodgers Lang of Danielsville, Ga.; they have one son.

Practical Pharmacy Edition

Journal of The American Pharmaceutical Association

E. F. Kelly, Editor, 2215 Constitution Ave., Washington, D. C.

The Scientific and Practical Pharmacy Editions of the Journal

Beginning with the present month, the JOURNAL of the ASSOCIATION will be issued in two parts: a Scientific Edition which will be limited to scientific articles, reports and abstracts, and a Practical Pharmacy Edition in which all other matters of interest will appear. Both editions will be of the same page size to facilitate binding, storage and the interchange of material. The Scientific Edition will be edited by A. G. DuMez and will be distributed about the fifth of each month; the Practical Pharmacy Edition will be edited by E. F. Kelly and will be distributed about the twentieth of each month.

Both Editions will be sent to the present members of the ASSOCIATION until December 31, 1940, after which time experience may necessitate a change in this plan. In addition, the Practical Pharmacy Edition will be sent to all other dues-paid members of the state pharmaceutical associations during 1940.

This program has been developed carefully and has several objectives. It is expected that the Scientific Edition will be of greater value to those interested in the scientific phases of Pharmacy since it will be devoted solely to the publication of scientific articles, reports and abstracts to which increased space and special attention can be given. It is also expected that the Practical Pharmacy Edition will appeal strongly to the practicing pharmacists in every branch of the profession since it will deal with their professional problems, will serve them in promoting professional service of every type and will give publicity to the activities of the ASSOCIATION as well as to other professional trends and events of national importance in the field which the A. PH. A. serves. Under this arrangement, those connected with Pharmacy may make use of either or both editions as their interests may decide which should result in a more satisfactory and helpful publication service.

For several years, there has been an increased request that the ASSOCIATION arrange to send some publication to the members of the state pharmaceutical associations in order to give them a direct contact with the A. PH. A. and to keep them informed about the activities and objectives of the ASSOCIATION. It was, therefore, decided to send the Practical Pharmacy Edition to these members to determine if it will serve this purpose satisfactorily. As has

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been previously stated it is hoped that the publication will be of real help to the state pharmaceutical associations and that it will assist in bringing about a closer knit and stronger professional organization which is needed now and will be needed in the future even more than in the past.

E. F. KELLY, *Secretary*

A. G. DUMÉZ,

Chairman Publication Committee

Education in Pharmacy

Organized education in Pharmacy has been of increasing interest to American pharmacists since the first college of pharmacy was established in this country. Now that forty-six states and the District of Columbia require graduation from an approved school or college of pharmacy in order to enter the examination for registration as a pharmacist, pharmaceutical education becomes of primary importance to the profession. To the teaching institutions, the profession must now look for the training of its recruits and for the continued training of the pharmacists in practice. These institutions are becoming, more and more, an integral part of the pharmaceutical organization of the states in which they are located, and the state pharmaceutical associations are, in turn, taking a more direct interest in them.

The pharmaceutical industry is making greater use of these institutions each year through employment of their graduates and through coöperative research. In turn, the industry is beginning to take a more direct interest in the schools and colleges of pharmacy as should be the case.

Pharmaceutical education has advanced to a remarkable extent in recent years. The practicing pharmacists and the members of the industry should do their part to assist those who are directing these institutions to accomplish the many things that yet remain to be done. In particular they should tell the institutions how well their graduates meet the requirements of practice.

Several articles in this issue record real accomplishments toward this goal and they are referred to here to emphasize their importance and to indicate that each of them deals with some phase of this program to improve pharmaceutical education and to make it more serviceable to pharmacists and to the people.

1. The statement of the American Council on Pharmaceutical Education and the first list of schools and colleges of Pharmacy which the Council has accredited. This statement and list should be studied carefully by every pharmacist not only because of their importance to the profession but also because this difficult job has been done by the profession itself. It represents an effort by the profession to bring its teaching institutions to a higher level of efficiency.

2. The first of a series of articles to appear monthly in this publication and to be furnished by Editor R. A. Lyman of the *American Journal of Pharmaceutical Education*, with the object of informing practicing pharmacists about the present program and the objectives of the schools and colleges of pharmacy.

3. An article by Mr. Dretzka outlining the progress of the program of the "refresher course" as carried out in Wisconsin with aid from the George Deen Act. Last year this association furnished complete information about the deans of the schools and colleges of Pharmacy, and to the secretaries of the state associations and state boards. Several states have taken advantage of the opportunity.

Refresher courses of one kind or another are being carried on in other states and the movement should be extended. The developments in Pharmacy are now so extensive and so rapid that pharmacists, like the members of other health professions, cannot keep up with them unless they are assisted. In meeting this need the schools and colleges of Pharmacy can make themselves of assistance to the pharmacists directly and personally.

Attention is also directed to the first of a series of articles to be furnished by the Secretary of the National Association of

Boards of Pharmacy. These articles will deal with the process of registration which is the next step after education and closely related to it.

The Pharmacist and the Dentist

Drugs will, no doubt, play an increasingly important part in the practice of Dentistry in both prevention and treatment. This probability is recognized by the dental as well as the pharmaceutical profession. Some years ago, the American Dental Association established the Council on Dental Therapeutics which has since 1930 issued annually Accepted Dental Remedies. The publication lists and describes those pharmaceutical articles which stand acceptable to the Council on Dental Therapeutics. This list includes those official drugs and preparations which are considered to be of greatest usefulness in the field of Dentistry and non-official articles marketed in conformity with the rules of the Council.

The A. P. H. A. appointed a Committee on Dental Pharmacy to give special consideration to the opportunity and responsibility open to Pharmacy in coöperation with Dentistry. Through this Committee contacts have been established with the Council on Dental Therapeutics and with other dental groups and teaching institutions. Exhibits have been made at meetings of the American Dental Association and of state and local associations. Pharmacists have participated in dental meetings and clinics. Several state and local pharmaceutical organizations have developed dental programs. Special committees of dentists have been invited and have coöperated in the recent revisions of the National Formu-

lary and the Pharmaceutical Recipe Book to insure that any special drugs or preparations required in Dentistry should be recognized. Based on the experience gained in these activities, the Committee plans to undertake additional efforts to promote closer and more effective coöperation between dentists and pharmacists. At the Minneapolis meeting of the ASSOCIATION in 1938, the Committee submitted the outline of a tentative National Dental Program which was favorably discussed with the urgent request that it be published at the earliest possible date. The coöperation of the Council on Dental Therapeutics of the American Dental Association with the Committee on Dental Pharmacy of the AMERICAN PHARMACEUTICAL ASSOCIATION has resulted in a program which should be effective. This program has been perfected and is explained by Chairman Schicks on page 18 of this issue.

It is hoped that this program will be helpful to dentists and pharmacists all over the country.

At the Atlanta meeting the Committee reported that it had undertaken to learn the number of hours and the nature of the courses devoted to the study of drugs by dental colleges, the opinion of dentists on the practicability of their college courses in dental medication, the dentist's present interests and needs for office and the patients' use, and the opportunity for pharmacists to assist the dentist in his problems of medication. Questionnaires were sent to all of the colleges of dentistry in this country and to dentists in six selected states. The replies indicated clearly that dentists will welcome the helpful advice and assistance of pharmacists and that the colleges of dentistry are improving the instruction dealing with drugs and their uses.

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The Teacher and the Retail Druggist—The Soul and Backbone of American Pharmacy

Through the courtesy of Dr. E. F. Kelly, the American Association of Colleges of Pharmacy has been offered the privilege of using a page in the new journal each month for the purpose of placing before the retail druggists of America any items concerning pharmaceutical education that might be of interest to them. As a matter of fact every problem in, and every phase of pharmaceutical education is of vital interest to both the retail druggist and the pharmaceutical educator.

There has been much criticism of the educational program in Pharmacy. In this connection it should be remembered that to-day all education is in a turmoil. Likewise, the whole world and everything in it is topsy-turvy. In a recent article in the *Sateepost*, Dr. Robert Maynard Hutchins, President of the University of Chicago, says this of education in general—"We do not yet know how to organize a university or how to manage it; we do not know whom to teach, what to teach or how to teach; we do not know the relation of education and research; we do not know what kind of education will strengthen the foundations of democracy. We are unclear about our aims, and fumbling in our methods. But education is our only hope." There is no group of men that realize the inadequacy of their educational program more keenly than that group engaged in pharmaceutical education, never-the-less, a survey of the requirements for the study of Pharmacy and of the progress in the coördination and in the improvement of the pharmaceutical curriculum since the turn of the century, reveals an advancement which is almost unparalleled in any other field of education. We are not yet satisfied with our accomplishments and to-day we are revamping the entire pharmaceutical educational program. A new Syllabus revision is being made on a scientific basis. Pharmaceutical education is being standardized by the American Council on Pharmaceutical Education.

As a matter of fact, the interests of the colleges of pharmacy and of the retail practitioners are inseparable. The history of the professions point definitely to the fact that those lines of endeavor which have developed the most outstanding and the most forward-looking educational programs are the ones that are now most highly regarded by the public. This is especially true when that program has been supported by the rank and file of the profession. Opportunities do not just happen by accident in any professional field or in any business, they are created. To attain this, we must have in the educational field men of vision who will do creative planning, and in the profession, practitioners who will support those plans.

What Pharmacy most needs to-day is not only the moral, but the financial and militant support of its educational program and its educational and research institutions on the part of retail druggists.

In the coming months there will be presented on this page information which will acquaint the retail druggist with the present status and objectives of the pharmaceutical educational program and of the benefits of this program to the profession, to the public and to him personally.

RUFUS A. LYMAN, *Editor*

The Human Side of Reciprocity

Why do pharmacists need or want reciprocity? To answer that question, a whole stack of letters was taken out of the files of the National Association of Boards of Pharmacy and carefully read and analyzed. This correspondence forms the basis for a very interesting study in the human side of reciprocity.

Opportunity Knocks

Business opportunities not found at home are certainly one of the causes of moving from one state to another. Let's read some extracts from the letters:

"I desire to open a small pharmacy." "I want to buy a drug store in another state." "My father is practicing in Georgia and I

want to join him." "I have vital interests in Oregon." "I have a very good offer in Mississippi with chances for advancement." "I am with a manufacturing firm and I need a licence to take up detail work in another state." "I have been offered a better position with my company if I can get a license elsewhere."

It is the American success story, freedom of opportunity, ambition and the desire to get ahead, and then grasping opportunity by the hand when it knocks. But if it were not for the system of interstate reciprocity established by the N. A. B. P. and kept functioning under the constant supervision of the ASSOCIATION and the State Boards of Pharmacy, many of these opportunities might have to be turned down for lack of a license to practice.

The Call of Family Ties

There is also found in this stack of letters the family theme, best expressed in "I want to be with the folks." Here again are a few sentences actually culled from the files:

"I have been a registered pharmacist for thirty years in this state, but my parents and relatives are all living in Farawaytown and I want to sell my pharmacy and go there to live." There are many versions of this central theme. Sometimes it is the girl in the heart of Maryland that he wants to marry, so he decides to move to that state. Or, sometimes she may say, "Thy people shall be my people" and after following him to the ends of the earth, a severe attack of homesickness sets in. Being a modern woman, she solves her problem by having the folks back home get a job for John, and all that stands in the way is a license to practice. Reciprocity is the connecting link.

Or there may be aged parents to support, and going back home and doubling up is the only way of providing the necessary budget to do it. It's the age old instinct of loyalty to the clan, and there is a very definite feeling of satisfaction in helping to carry it through.

Quest for Health

The quest for health is another important reason for these changes from state to state.

Again let's refer to the letters: "My physician tells me that a change of climate and altitude would be of benefit to me." Or, "I am trying to locate in the South because of my wife's health."

Older people seek a warmer climate; those with tuberculosis want a dry climate and have played a great part in building up the West, gaining health in return. Southerners who are convalescing from malaria find a stay in the North beneficial and often remain.

Parental Love

Doesn't this brief story of parental love tug at your heartstrings? "I have a son who is now about 12 years old who has been very ill...leaving him crippled. I owned a drug store, which I lost due to expenses for hospitalization. I would like to make my home permanently in a warmer climate, where he will build up resistance and recuperate, as I am very thankful that I have my son."

And another one: "My youngster is ill with juvenile t.b. and the doctor advises me to take her west."

Sometimes it is education: "I have two youngsters that need educational facilities beyond those to be obtained here."

Migrations

A careful study of trends in reciprocity over a period of years furnishes background material for an economic history of America.

During the dark days of 1932, for instance, there was a very decided trend out of the "big-city states" and into the "rural" communities. Correspondence revealed that men of considerable means in the cities after failure caused by overexpansion would salvage a few hundred dollars and start over again in some small town without pharmaceutical service. Pharmacists losing a city job, who had saved a nest egg, also found opportunity beckoning in the rural communities. Aided by reciprocal agreements between the states, this decentralization movement in Pharmacy proceeded unhampered and placed the profession nationally in a much better economic position.

There have been many novels written about the migrations from the Dust Bowl

and hitting the old Oregon trail. Reciprocal statistics confirm the fact that the pharmacist often accompanied the farmers in these migrations and started a small drug store in the new towns.

The Council on State Governments in its work of breaking down interstate barriers has warned against the "Balkanization" of the states and the setting up of 48 different and separate kingdoms. Our economic policy should be national and not bounded by state lines.

What Reciprocity Means

To pharmacists, these reciprocal agreements between states constitute an insurance policy. Maybe they will need it, perhaps not, but it is a good feeling to know that this protection is there. They never know when the stresses and strains of this modern civilization, a good business opportunity, the desire to live with the folks, the need to regain your health or some other reason may call them to a distant spot unexpectedly.

If so, could they qualify for entrance to the Board examination under present-day standards? If so, could they pass the examination? The reciprocal agreements exempt them from higher requirements enacted by other states after your original registration date.

The system of reciprocity is not all-inclusive. There is no reciprocity to and from the states of New York and California. Nor are all registrants of other states eligible in all of the other reciprocal states. Technicalities will not be covered in this article, but if you want further information, please write the National Association of Boards of Pharmacy, H. C. Christensen, Secretary, 130 N. Wells St., Chicago, stating your problem.

The Conference of Pharmaceutical Association Secretaries

By J. Lester Hayman, Secretary

THE AMERICAN PHARMACEUTICAL ASSOCIATION, during its existence of more than 85 years, has continuously represented the finer qualities of a great profession. As we look back over the years we instantly recognize that its directing officers were the leaders of the profession in America, men with high ideals, unselfish in personal desires and endowed with a determination to keep Pharmacy upon a high ethical plane. Each generation has witnessed certain fundamental changes in the practice of Pharmacy but Pharmacy, the profession, will continue to serve mankind in an honorable manner for ages to come as it has for the hundreds of years in the past, and the AMERICAN PHARMACEUTICAL ASSOCIATION must and will continue to represent Pharmacy.

Since the early days there have been issues and problems too numerous to mention or discuss which have been most discouraging to the majority of the practitioners. The pharmaceutical leaders with cool deliberation and careful consideration have fought on undauntedly and Pharmacy has continued to progress until to-day it enjoys a professional standing higher than it has ever held heretofore.

Unfortunately only a comparative handful of the 100,000 practicing pharmacists realize the usefulness and value of the AMERICAN PHARMACEUTICAL ASSOCIATION to their personal welfare and to their business and profession. This is particularly true of the retail pharmacist, a condition that has been realized for many years by the secretaries of state pharmaceutical associations. THE JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION has had for its prime object the dissemination of scientific articles on pharmaceutical subjects, which are of prime importance and indeed quite necessary and yet are of little interest as reading material to the majority of retail pharmacists. These particular individuals are no more

The Dunning Science Building, donated by Dr. H. A. B. Dunning, to Washington College at Chestertown, Md., was dedicated at a special convocation held on Tuesday, January 16, 1940. The Building will house the Department of Chemistry, Physics and Biology. The honorary degree of Doctor of Science was awarded to Dr. Dunning, during the exercises.

philanthropic in diverting funds to worthwhile projects in which they have only a passing interest than other groups of individuals. The natural result has been that the average retail pharmacist has had little or no contact with the AMERICAN PHARMACEUTICAL ASSOCIATION.

The Conference of Pharmaceutical Association Secretaries has recognized that we have in the United States a fine national pharmaceutical association which year in and year out materially contributes to the welfare of the retail pharmacist but which works so smoothly and so efficiently that the recipients of its labor and efforts know not of its value. At the same time many, if not most, of the retail pharmacists are eager to learn of the modern trends of the profession but need such information in concise form and in a language which they can readily comprehend. The Conference of Pharmaceutical Association Secretaries has believed that a solution to the problem would be in the issuance of a suitable publication by the AMERICAN PHARMACEUTICAL ASSOCIATION of which there is a great need and yet not to duplicate or attempt to replace any existing publication in the field. After several years of study, consideration and planning, the Conference feels that the Practical Pharmacy Edition is an answer to their plea. Its success will certainly depend upon its usefulness and its appeal to the practicing pharmacist. It can serve as it should only through the co-operation of the individual pharmacists and the directing officers of pharmaceutical associations, city, county, district and state. It is our belief that those responsible for its publication want it to be practicable and serviceable. May we urge that you *READ IT, USE IT* and do not hesitate in expressing your honest opinions about it.

Our congratulations go with this issue and with each issue to follow in realizing what the Conference believes to be real service to retail pharmacy.

Pharmacy continues to advance in America.

Retail Pharmacists—Are You Interested?

*By C. B. Jordan**

During the past decade there has developed in many parts of the United States groups of pharmacists who are much interested in the advancement of the professional aspects of their calling and who are very conscious of the criticism that is leveled at the average drug store by both the medical profession and the public. Such groups have been formed in Philadelphia, New York, Gary, Chicago, West Virginia, Cleveland, Columbus, etc. It is quite evident that this is more than a minor movement, it is really an urge for the professionally-minded pharmacists to do something to bring a better professional atmosphere into the drug store and a better understanding of the importance of Pharmacy in medical science.

Many of the individuals who are taking part in this movement are very conscious of the fact that the public and also the members of the health professions are judging Pharmacy from the "corner" drug store and, of course, when they speak of Pharmacy they emphasize the worst conditions that are to be found in these corner drug stores. It is needless for me to dwell upon these unsatisfactory conditions, every retail pharmacist is cognizant of these. The question that is uppermost in the minds of these groups is, "What can we do to raise the dead level of pharmaceutical practice to the point where it will command respect from the public and from our sister professions?"

Several plans have been suggested to accomplish this purpose and each of these groups has a plan that may vary in one way or another. Because of my activity in organizing a conference of professional pharmacists at the last meeting of the A. PH. A. and because I am Chairman of the Professional Relations Committee of the A. PH. A., a good deal of correspondence incident to this movement has centered in my office. I am very anxious to know what the

* School of Pharmacy, Purdue University, Lafayette, Ind.

reaction of the retail druggists of the country will be to a plan which will attempt, at least, to accomplish the above-mentioned objectives. The plan I am about to suggest is not mine but is more or less a composite of several plans that are in operation or that hope to be put into operation within a year or two.

1. Any movement to unify the professionally-minded pharmacists of the country should center in and be under the auspices of the AMERICAN PHARMACEUTICAL ASSOCIATION. This is the one national professional organization in Pharmacy and its avowed objects are to promote the profession of Pharmacy. The ASSOCIATION publishes a monthly JOURNAL in two editions—the Scientific and the Practical Pharmacy Editions—which also includes abstracts of the pharmaceutical literature of the world; it issues the National Formulary, the Pharmaceutical Recipe Book, the U. S. P.—N. F. Prescription Ingredient Survey, the Professional Pharmacy and other valuable professional monographs; it is equipped with a good Reference Library, an Historical Museum and a good Laboratory; it is now promoting better professional relations and contacts, and striving in every possible way to improve the service and standing of Pharmacy. It is so well established that it commands respect from the organizations of our sister professions and is, as I see it, the one organization that should sponsor, unify and perfect this movement throughout the United States.

2. It is planned to organize within the AMERICAN PHARMACEUTICAL ASSOCIATION a section or sub-organization to be known as the American Academy of Pharmacy or some other name to be chosen by those who assist in the organization of the movement.

3. If the movement is to be successful, membership in the organization (whatever it may be called) should be open to every retail pharmacist who wishes to maintain the standards required for membership. In other words, this is not a highbrow organization that proposes to set up a "holier than thou" group, but is an organization that proposes to raise the standard of Pharmacy by demanding of its members certain

standards which will affect the store and the proprietor.

4. Some of the plans include a central office manned by at least one (perhaps more) individual properly trained for professional contact work and also the necessary stenographic services needed to maintain such an office. This office will render services to the membership as requested, such as contacting the local physicians, explaining the aims and purposes of the organization and the requirements for membership, detailing physicians on U. S. P. and N. F. products, developing between pharmacist and physicians a better relationship and understanding, etc.

5. The plans include a service to be rendered to the members of the organization for which the membership will pay a basic sum and then another sum in proportion to the services that they require of the organization. This can best be explained by stating that every member should be a member of the AMERICAN PHARMACEUTICAL ASSOCIATION and a member of a state pharmaceutical association. The basic sum should include at least the cost of membership in the A. P. H. A. and also the general cost of maintaining the organization. The prorata dues will, of course, depend upon the services demanded. If one pharmacist requests that the organization contact twenty-five physicians and another pharmacist fifty physicians, they will, of course, pay in accordance to the services they request.

As before mentioned, the plans of each of these groups vary but they all include some qualifications for membership. In order to have something to shoot at, the following qualifications for membership have been suggested by one of the groups:

"Any pharmacist shall be eligible for membership if fully satisfying the following requirements:

"1. Must be a registered pharmacist in his state and shall have practiced Pharmacy for 5 years as a registered pharmacist.

"2. Must be a citizen of the United States.

"3. Must be of good moral character.

"4. Must be actively engaged in the practice of Pharmacy at the time of application for membership.

"5. Must be a member of the AMERICAN PHARMACEUTICAL ASSOCIATION and a member of his State Pharmaceutical Association.

"6. Must comply at all times with the Constitu-

tion and By-laws of the American Academy of Pharmacy? and the Code of Ethics of the AMERICAN PHARMACEUTICAL ASSOCIATION.

"7. Must comply with all laws, federal, state and local, governing Pharmacy.

"8. Each store owned and operated by an applicant for membership in the American Academy of Pharmacy? must comply with the following requirements:

"A. Store exterior or display windows shall not display any signs or displays of cigarettes, cigars, tobacco or liquor. There shall not be any permanent patent medicine signs other than those of franchised or controlled lines of drug store merchandise. A professional window display advertising the profession of Pharmacy shall be displayed in the window at least two weeks of each month; if the store has no display windows this provision will be waived. Displays not consistent with good pharmacy practices shall not be used. The store front must be in good repair and the windows kept clean at all times.

"B. The general appearance of the store interior shall be one of cleanliness and order. The interior of the store shall be such as to make it immediately apparent to the public that it is predominantly a Pharmacy and no other activity materially detracts from the profession of Pharmacy. The store shall be well lighted and well ventilated. There shall be no lotteries or gambling devices in the store.

"C. There shall be a registered pharmacist on duty at all times when the store is open.

"D. The prescription department shall be clean, well lighted and well ventilated, and shall be equipped with a sink with proper sewerage outlet and facilities for securing hot and cold water.

"Prescription Department must have the following equipment:

"Prescription balance sensitive to $\frac{1}{16}$ grain

"Less sensitive scales to weigh from 1 dram to 2 ounces

"Apothecary weights from $\frac{1}{2}$ grain to one ounce

"Metric weights from 1 mg. to 50 Gm.

"Accurate graduates as follows:

*Set No. 1—(one of each) *Set No. 2—(one of each)

60 minims	5 cc.
2 drams	10 cc.
4 drams	15 cc.
1 ounce	30 cc.
2 ounce	60 cc.
4 ounce	125 cc.
8 ounce	250 cc.
16 ounce	500 cc.
32 ounce	1000 cc.

Set No. 3—(one of each)

"Mortars and pestles as follows:

4 ounce glass or porcelain

8 ounce glass or porcelain

4 ounce Wedgwood

8 ounce Wedgwood

16 ounce Wedgwood

"Spatulas, 3 steel assorted sizes and 2 non-metallic assorted sizes

"Stirring rods, 3 glass assorted sizes

"1 Glass percolator, 1 Ring stand complete, Glass funnels (one of each) 2 oz., 8 oz., 16 oz., 1 Pill tile, 1 Flask 100 to 1000 cc., 6 assorted size test-tubes, 1 four-ounce beaker, 1 eight-ounce beaker, 1 Suppository mold, 1 Ointment slab, 2 Evaporating dishes, 1 Water-bath or sand-bath, 1 Thermometer registered from -10° to 250° C., 1 Set of sieves, 1 Bunsen burner, 1 Tripod and screen, 1 Typewriter (all direction labels must be typewritten), 1 Numbering machine or Check system, Suitable prescription files, 1 Refrigerator operating at a temperature not to exceed 45° F. (no food-stuffs shall be kept in this refrigerator).

"An adequate supply of the following: Empty capsules, powder papers, filter paper, litmus paper, labels, bottles, ointment jars, vials and dropper bottles, pill and powder boxes. Only new bottles may be used for prescription dispensing. Graduated bottles shall not be used for prescription dispensing, clean towels.

"Library:

"Latest editions of the U. S. P. and all supplements, N. F. and all supplements, a Dispensatory, and New and Non-Official Remedies. Ten books reasonably distributed among the following subjects: Practice of Pharmacy, Pharmaceutical Recipe Book, Non-Official Remedies, History of Pharmacy, Pharmaceutical Arithmetic, Latin, Botany, Pharmacognosy, Reagents, Pharmacology, Therapeutics, Incompatibilities, Toxicology, Chemistry, Bacteriology, Physiology, First Aid or allied subjects.

"Stock of drugs, chemicals and biologicals sufficient to take care of the needs of the community.

"Wearing of a professional jacket by all registered pharmacists is recommended.

"Store shall be subject to inspection at all times."

If I may be allowed to express my own viewpoint in the matter, I would say that I believe the time has come for the pharmacists of the country to realize fully that a better professional atmosphere should be found in our pharmacies and that the pharmacist should be inspired to affect a better professional attitude than is found in many of our stores. I think we all will admit that Pharmacy has a splendid opportunity to better itself in the eyes of the public and in the eyes of our sister professions if this better professional atmosphere and attitude can be encouraged and developed.

* A complete set of double scale graduates may be used in place of Sets Nos. 1 and 2.

Whether or not the above outlined organization is the best thing we can use to accomplish these ends may with justice be questioned. However, it does seem to me that we should give consideration to this plan unless we have a better one. Will the retail pharmacists of the United States frankly criticize and offer suggestions for improvement of the above sketch of the outlined plan, or, if the plan is not satisfactory, will they offer something better? I am sure that Dr. E. F. Kelly, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION, will be glad to receive your criticisms, and I can assure you that I shall be more than pleased to receive them. Send them on. We are particularly anxious to receive constructive criticism. I am sure that the officers of the AMERICAN PHARMACEUTICAL ASSOCIATION will give very careful consideration to any thought you care to express.

Enforcement of Standards for Purified Cotton in the "Second U. S. P. XI Supplement" Postponed

The Board of Trustees of the U. S. Pharmacopœial Convention has just announced that the enforcement of the new U. S. P. standards for Purified Cotton (Absorbent Cotton) recently issued in the "Second U. S. P. XI Supplement" will not be effective until July 1, 1940.

This action has been taken in accordance with a recommendation of the U. S. P. Committee of Revision, the new standards for Purified Cotton requiring all official cotton to be sold in packages of not more than 1 lb., the product to be sterile and of at least a minimum fiber length. This has required such extensive changes in commercial practice that it is difficult to meet the requirements before July 1, 1940. Furthermore, additional investigations are being conducted in the Cotton Economics Bureau of the Department of Agriculture, on the average fiber length of acceptable varieties of Absorbent Cotton. In this investigation the Government laboratory is coöperating with manufacturers and until this study has been completed, the results of manufacturing processes in the production of fiber lengths will be uncertain.

E. FULLERTON COOK, *Chairman,*
U. S. P. Revision Committee

The A. Ph. A. Meeting and the U. S. P. Convention

An Important Ten Days for Pharmacy,
May 5 to 15, 1940

Richmond will be the host city for the 88th annual meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION and the affiliated organizations that meet at the same time and place: American Association Colleges of Pharmacy, National Association Boards of Pharmacy, National Conference of Pharmaceutical Research, Plant Science Seminar, Conference of Association Secretaries, Conference of Law Enforcement Officials and a number of societies and fraternities.

The Jefferson Hotel will be the headquarters for this gathering and it is admirably equipped with comfortable rooms, large meeting halls and a splendid lobby, to entertain this busy gathering. The hotel is located out of the business center, is quiet, and yet is near enough to the shopping section and other interesting locations to be convenient. Other hotels are located near-by and the rates for rooms and for meals are reasonable. Reservation should be made as promptly as possible.

Mr. L. C. Bird, who will direct the meeting as Local Secretary, and his associates, have had experience in arranging for Virginia pharmaceutical meetings and for the recent meetings of the American Chemical Society and American Association for the Advancement of Science in Richmond. These meetings were also held at the Hotel Jefferson.

Richmond is a most interesting city from many points of view and is at its best early in May. This meeting follows the week of the Garden Club Tours to famous places in Virginia. The meeting will open Monday forenoon and continue until Saturday noon. Special entertainment will be provided especially for Saturday afternoon and Sunday—possibly a trip to historic Jamestown and Williamsburg—after which the visitors will travel to Washington.

The Eleventh Decennial U. S. P. Convention will be held in the Willard Hotel on

Tuesday and Wednesday, May 14th and 15th with probably a special Scientific Session on Monday, May 13th, devoted to a general discussion of pharmacopœial problems. This will be a very important convention not only because it is held only each ten years but also because recent developments will probably call for some decided changes in the method of revising the Pharmacopœia.

Visitors as well as delegates are privileged to attend both the A. Ph. A. meeting and the U. S. P. Convention. Set aside the dates now and consult your transportation agent. Further information will be given next month.

The Association for the Advancement of Professional Pharmacy

A joint dinner-meeting of practicing dentists, dental internes and senior dental students with the members of the Association for the Advancement of Professional Pharmacy acting as hosts was held at the Hotel Empire, Tuesday evening, December 19th.

The subject of the meeting was "The Dental Prescription" and the object of this joint gathering was to bring to the attention of both professions various official dental formulas and prescriptions, and to bring to the attention of the dentist, the fact that his pharmacist can serve him in many ways, to the advantage of both professions and the public health.

Interesting and informative talks along dental therapeutic lines were given by Dr. L. R. Cipes of the Department of Health of the City of New York and Dr. George C. Schicks, Professor of Materia Medica of the New Jersey College of Pharmacy, Rutgers University, and Chairman of the Dental Pharmacy Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION.

A. Ph. A. and N. A. R. D. booklets on "Official Dental Preparations" were presented to all present and, in addition, interesting exhibits were prepared of typical dental window displays and numerous official dental preparations. The consensus of opinion following lively discussion by both the dentists and pharmacists was that more such meetings should be held.

Among the guests of the dental profession present were: Dr. Frank Lewis, President of the Ninth District Dental Society; Dr. J. J. Stark, Attending at Brooklyn Cancer Hospital; Dr. B. Gerstner, President of the Allied Dental Council; Dr. B. Cavalieri, Attending St. Joseph's Hospital; Dr. N. Winkler, Attending Fordham Hospital; Dr. H. Wack, Chief Dental Service Cornell University; and Dr. H. Osserman, Attending at New York Poly-clinic Medical School and Hospital.

The Twenty-Seventh Annual Meeting

American Social Hygiene Association
and Regional Conference
with the coöperation of
U. S. Public Health Service
American Medical Association
AMERICAN PHARMACEUTICAL
ASSOCIATION
will be held
at the Palmer House, Chicago, Ill.
on Thursday and Friday, February
1 and 2, 1940.

General Theme: Education of the public regarding the nature of syphilis and gonorrhea, the proper sources of medical care and the background conditions which contribute either to the spread or the prevention of these diseases.

The three general sessions will be devoted to the following subjects: Fundamental Background Problems, The Problems of Quackery and Professional Coöperation. President A. G. DuMez of the A. Ph. A. will address the third session on "Standards and Ethics of the Pharmaceutical Profession. How Can the Coöperation of the Pharmacist Be Obtained?"

A fourth session will be devoted to four sectional meetings one of which will consider "Pharmacy and Medical Practice Laws and Their Enforcement" to be followed by a luncheon meeting at which each section will submit its report.

Several other topics will be of direct interest to pharmacists, notably, "Quack Medicines for Syphilis and Gonorrhea" which will be discussed by Dr. J. J. Durrett of the Food and Drug Administration, U. S. Department of Agriculture and a "Report of a Survey of Quackery and Other Illegal and Unethical Practices" recently made by the American Social Hygiene Association.

Pharmacists are invited to attend any of the sessions from any section and invitations are being sent to state pharmaceutical associations in the Chicago vicinity, by the American Social Hygiene Association.

A report of the conference will appear in the February issue of this publication.

List of Accredited Colleges of Pharmacy in the United States of America

Issued by the American Council on Pharmaceutical Education, Inc., January 1, 1940

(As of December 1, 1939, and subject to annual revision)

Scope of List

The list of accredited colleges of pharmacy published herewith includes only institutions operating in the United States proper. It is expected to extend this list to include the colleges of pharmacy operating in the possessions of the United States as soon as a satisfactory plan for so doing can be worked out.

On December 1, 1939, there were seventy colleges of pharmacy in the United States proper offering systematic instruction leading to a degree in pharmacy. Of this number, sixty-two made application to the Council for accreditation.

Auspices Under Which Prepared

This list of accredited colleges of pharmacy has been prepared by the American Council on Pharmaceutical Education, Inc., organized in 1932 and sponsored and authorized by the AMERICAN PHARMACEUTICAL ASSOCIATION, the National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy. Each of these associations has three representatives on the Council and there is one representative from the American Council on Education who acts in an advisory capacity. The present membership of the Council is as follows:

Representing the AMERICAN PHARMACEUTICAL ASSOCIATION:

E. F. Kelly, President, Washington, D. C.
H. A. B. Dunning, Baltimore, Md.
David F. Jones, Watertown, S. D.

Representing the National Association of Boards of Pharmacy:

H. C. Christensen, Vice-President, Chicago, Ill.
A. C. Taylor, Washington, D. C.
R. L. Swain, New York, N. Y.

Representing the American Association of Colleges of Pharmacy:

A. G. DuMez, Secretary-Treasurer, Baltimore, Md.

Townes R. Leigh, Gainesville, Florida
C. B. Jordan, Lafayette, Indiana

Representing the American Council on Education:

David A. Robertson, Baltimore, Md.

The activities of the Council up to 1938 were confined largely to work incident to the drafting of standards to be used as a basis for accreditation. Since 1938, the Council has been engaged in applying these standards to the colleges from which applications for accreditation were received. In each case, application for accreditation has been a voluntary act on the part of the college making such application.

Basis for Accrediting

The Council has used as the basis for accrediting the standards which were adopted August 15, 1937. More than five years were devoted to the preparation of these standards and, in their preparation, the Council had the coöperation of the colleges of pharmacy, the state boards of pharmacy, the AMERICAN PHARMACEUTICAL ASSOCIATION, the National Association of Boards of Pharmacy, the American Association of Colleges of Pharmacy, the American Council on Education, the departments of education of some of the states and a number of individuals who have manifested an interest in pharmaceutical education. As a final test of the practicability of these standards, trial inspections were made of seven colleges of pharmacy, including at least one representative from each of the three types, *i. e.*, independent colleges, university colleges, affiliated colleges.

In the actual application of these standards to the colleges which have sought accreditation, the Council has not insisted on strict conformity in every detail but has assumed the attitude that certain reasonable variations should not mitigate against a

favorable decision. It has held to the principle that excellence in certain features of a college may compensate for deficiencies in other features.

In all cases, both qualitative and quantitative, criteria have been used in determining the acceptability of a college for accreditation.

Quantitative criteria have been evaluated largely through data secured from catalogs and other publications and from the information given on extensive questionnaires completed by the respective colleges. These criteria include the following:

1. Auspices, organization and control of the institution.
2. Finances. Source of income, investment and expenditures.
3. Age of the institution and of the four-year curriculum.
4. Basis of requirement for admission of students.
5. Number enrolled.
6. Curricula and degrees offered.
7. Attendance, promotion and graduation requirements.
8. Teaching staff and teaching load.
9. Physical facilities.
10. Etc.

Qualitative criteria have been evaluated in part through the information from questionnaires and in part through visits of inspection by committees consisting of at least two members of the Council. These criteria include the following:

1. Qualifications, experience, scientific or scholarly publications of the members of the faculty. Also their contacts with scientific and professional societies.
2. Standards and quality of instruction.
 - a. In the pharmacy departments.
 - b. In the coöperating departments.
3. Scholastic records of students.
4. Extra curricula activities. Participation in the work of local, state and national pharmaceutical organizations.
5. Attitude and policy of administration toward its college of pharmacy and toward teaching, research, etc.
6. Etc.

Purpose of Accrediting

The primary objectives of accrediting as held by the Council are as follows:

1. To advance the standards of pharmaceutical education in the United States.
2. To indicate the character of the institutions offering instruction in pharmacy.
3. To provide a safe basis for the selection of pharmacy colleges by prospective students.
4. To provide a usable basis for the interpretation of inter-institutional relationships.
5. To provide a list of acceptable colleges of pharmacy for the use of state boards of pharmaceutical examiners and other interested agencies.

Period of Accreditation

The Council recognizes that standards for accreditation cannot be fixed and inflexible, that there is need for constant revision and improvement of policies and procedures, and that reinspections of the colleges at definite intervals will be necessary to make effective any changes in these policies. It is not likely, however, that a general reinspection of colleges will be undertaken before 1944, at the end of which year the requirement which makes it necessary for a college to receive at least twenty per cent of its income from sources other than student fees will become effective. This will require an investigation of the sources of income of the colleges already accredited as well as those which may seek accreditation in the future and would seem to be a logical time for reinspection. For the present it may, therefore, be assumed that in general the colleges listed below, except those specifically otherwise designated, are accredited for a period of four years from January 1, 1940. The list should not, however, be construed as indicating that the Council accepts each college as meeting its standards of accreditation in all respects and to the same extent and degree, but rather that each of them conforms to a general level which meets the spirit and purpose of the Council. Some of the colleges listed will require additional inspection within the next two years in order to satisfy the Council that they are adhering to its standards.

Accredited Colleges of Pharmacy

(The colleges starred are listed subject to reinspection in 1942)

Alabama:

Alabama Polytechnic Institute Department of Pharmacy.
School of Chemistry and Pharmacy.

California:

University of Southern California College of Pharmacy.

Colorado:

University of Colorado College of Pharmacy.

Connecticut:

* Connecticut College of Pharmacy.

District of Columbia:

George Washington University School of Pharmacy.

Howard University College of Pharmacy.

Florida:

University of Florida School of Pharmacy.

Georgia:

University of Georgia School of Pharmacy.

Idaho:

University of Idaho, Southern Branch, College of Pharmacy.

Illinois:

University of Illinois College of Pharmacy.

Indiana:

Purdue University School of Pharmacy.

Iowa:

Drake University College of Pharmacy.
State University of Iowa College of Pharmacy.

Kansas:

University of Kansas School of Pharmacy.

Kentucky:

Louisville College of Pharmacy.

Louisiana:

Loyola University, New Orleans College of Pharmacy.
Xavier University College of Pharmacy.

Maryland:

University of Maryland School of Pharmacy.

Massachusetts:

Massachusetts College of Pharmacy.

Michigan:

University of Michigan College of Pharmacy.
* Detroit Institute of Technology.
College of Pharmacy and Chemistry.
* Ferris Institute College of Pharmacy.
* Wayne University College of Pharmacy.

Minnesota:

University of Minnesota School of Pharmacy.

Mississippi:

University of Mississippi School of Pharmacy.

Missouri:

St. Louis College of Pharmacy.

Montana:

Montana State University School of Pharmacy.

Nebraska:

Creighton University College of Pharmacy.
University of Nebraska College of Pharmacy.

New Jersey:

Rutgers University, New Jersey College of Pharmacy.

New York:

Columbia University College of Pharmacy.
Fordham University College of Pharmacy.
University of Buffalo School of Pharmacy.

North Carolina:

University of North Carolina School of Pharmacy.

North Dakota:

North Dakota Agricultural College School of Pharmacy.

Ohio:

Ohio State University College of Pharmacy.
University of Toledo College of Pharmacy.
Western Reserve University School of Pharmacy.

Oklahoma:

University of Oklahoma School of Pharmacy.

Oregon:

Oregon State College School of Pharmacy.

Pennsylvania:

Duquesne University School of Pharmacy.
Philadelphia College of Pharmacy and Science.
Temple University School of Pharmacy.
University of Pittsburgh School of Pharmacy.

South Carolina:

Medical College of the State of South Carolina
School of Pharmacy.
University of South Carolina School of Pharmacy.

South Dakota:

South Dakota State College of Agriculture and
Mechanic Arts, Division of Pharmacy.

Tennessee:

University of Tennessee School of Pharmacy.

Texas:

University of Texas College of Pharmacy.

Virginia:

Medical College of Virginia School of Pharmacy.

Washington:

State College of Washington School of Pharmacy.
University of Washington College of Pharmacy.

West Virginia:

West Virginia University College of Pharmacy.

Wisconsin:

University of Wisconsin School of Pharmacy.

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A. G. DuMEZ, *Secretary-Treasurer*

Continuation Study for Pharmacists in Wisconsin Under the George Deen Act

*By Sylvester H. Dretzka**

Following the request of Editor Dr. E. F. Kelly, I herewith submit just what need be done by the pharmacists of the respective states in order to secure for Pharmacy, part of the funds made available for Distributive Occupations under the Federal George Deen Act.

1. Pharmacists should organize a committee. It is advisable to select the Board of Pharmacy as this gives each state a professional group with which to begin. This will please the vocational authorities. With such an official committee personnel, the vocational authorities will be impressed with the sincerity of the request and the authority back of it. When the plan is later established, this group can be used as the Advisory Committee to the State Supervisor of Distributive Education under the state vocational school system.

2. The committee should contact the State Supervisor or Co-ordinator of Distributive Education and emphasize the point that their sole motive is the promotion of better distribution of pharmaceutical and other Public Health products through the drug store.

3. In case the state in question has not as yet set up a Supervisor of Distributive Education, the next move should be to contact the Trade and Industrial Education Supervisor and to arrange with him the type of program which is being proposed and outlining its purposes.

4. This phase is very important. It consists in selling the authorities on the fact that Pharmacy, a profession, is at the same time a "distributive occupation." This was admirably done by our instructor, Edwin J. Boberg, in a paper entitled, "The Retail Drug Business as a Distributive Occupation."

"When measured by volume of total sales in dollars, more than half of the business (50.7%) in the

typical drug store is in the drug prescriptions, biologicals, first-aid material, proprietaries, rubber goods, surgical and hospital supplies and other products associated with the professions of Medicine and Pharmacy and the preservation of public health. All other departments combined produce 49.3% of the total volume of business (toiletries, sundries, fountain, candy, tobacco, stationery).

"By its nature the drug business must be classified as a distributive occupation. In the sale of drugs, medicines and medical supplies, however, other questions arise than those of salesmanship, price and merchandising. Considerations of public health are involved.

"The community at large is interested in the training and qualifications of the retail pharmacist. He handles and distributes a wide variety of products including deadly poisons, narcotic drugs, industrial chemicals, insecticides, concentrated acids, emergency first-aid material, hospital supplies and sick-room appliances.

"He must often advise regarding the proper selection and use of materials, sometimes on matters of a confidential or private nature, calling for a high degree of tact, diplomacy and professional knowledge.

"Because of the rapid advances made in many fields of knowledge related to Pharmacy, a program of continuation-study would seem desirable. Such a program would permit the pharmacist to increase his knowledge and efficiency through organized study and directed discussion."

5. The committee should be familiar with the total allotment for its State. This can be obtained from the A. P. H. A. office.

6. The committee when making the approach should be familiar with the "Aims and Purposes of Such a Course." We quote Mr. Boberg's outline of this phase as follows:

"The purpose of this course is to give instruction, information and inspiration to retail pharmacists, with a view to improving conditions in the profession. The following outline will give an idea of the scope of subject matter to be included as the plan develops:

"1. Refresher courses in Chemistry, Biology and Bacteriology. Review in Basic Sciences.

"2. Problems in Drug Store Management, Advertising, Window Display, Merchandising.

"3. Laws and Regulations: Common Law principles of rights, duties and responsibilities of the pharmacist. State and Federal Laws.

"4. Recent developments in Pharmacy, Medicine, Public Health.

"5. Outline Studies: Allergy, Vitamins, Sulfanilamide, Marijuana, Barbiturates.

"6. What the Leaders are Thinking. Review of current thought in Pharmacy.

"7. Special topics by outside speakers, local pharmacists, physicians, public health officials.

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"8. Question and Answer Department.

"The instructions used are largely a combination of Lecture and Conference methods. The groups are encouraged to participate in the discussions."

7. If approval is obtained, the Supervisor may ask the Pharmacists Advisory Committee to assist him in selecting a pharmacist instructor. The greatest care should be used by the committee in making recommendations. If possible a man who has had retail drug experience plus an academic pharmaceutical background, should be recommended.

Failure at this point may spell failure for the course itself, or at least retard its development.

Wisconsin has been extremely fortunate in securing a pharmacist with such qualifications. In addition Mr. Boberg has had seasoned experience as a Board Member.

8. If possible, the coöperation of all state and local pharmaceutical associations, the colleges of Pharmacy and pharmaceutical publications, should be obtained. These groups should be interviewed frequently by the Advisory Committee to ascertain the needs and desires of practicing pharmacists. One of the prime factors in establishing this movement in Wisconsin was Edwin S. Schweger of Green Bay, a Board Member and Vocational Director. Succeeding State Pharmaceutical Association Presidents and our Pharmacy College Dean have assisted.

Promotional space has been made available by the editor of the *Wisconsin Druggist*.

Much additional information on the educational side of the movement is available. We think it unwise, however, to submit such material at this time, as it may confuse those states whose immediate problem is to secure the funds to launch the program. When that has been accomplished, we will be happy to assist further in the phase of establishing the educational work itself.

The American Society for the Control of Cancer, through organized units of its Women's Field Army will conduct, during April, its fourth annual campaign of cancer education. Educate yourself and others to recognize early symptoms that may indicate cancer. Save some of the 150,000 who may die this year unless promptly treated. Enlist now and help in the intensive war against this disease.

National Dental Program

By George C. Schick,*

The Journal of the American Dental Association, through the coöperation of the Council on Dental Therapeutics, will publish a series of dental formulas jointly with the Practical Pharmacy Edition of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION for dentists and pharmacists. This is to be a coöperative program between the dental and pharmaceutical professions to promote official medication or any other, recognized by the Council on Dental Therapeutics, which has an application to the practice of Dentistry.

The first of the series will appear in the February issues of these publications and will continue for a period of about ten months. Each month these journals will bring to dentists and pharmacists formulas, the ingredients of which are known for their value. Any necessary explanations of their uses and directions for compounding will be given.

This series will be conducted by the Committee on Dental Pharmacy. Inquiries concerning dental pharmacy by dentists or pharmacists will be answered in this publication so far as space will permit. All communications will be given prompt attention by mail whether or not they are so answered. Communications should be sent to the Chairman of the Committee on Dental Pharmacy, AMERICAN PHARMACEUTICAL ASSOCIATION, 1 Lincoln Avenue, Newark, New Jersey.

Suggested Activities

Pharmacists who are interested in rendering the greatest service to the dental profession should plan to put into operation during the next few months the following activities:

1. Present in person or send to the dentists in your community the prescriptions as outlined each month in this series. Formulas should be printed on index filing cards or stenciled on sheets for the convenience of the dentist.

* Chairman, Committee on Dental Pharmacy, A. PH. A.

2. Before interviewing the dentist obtain (price \$1.00) a copy of "Accepted Dental Remedies" issued annually by the Council on Dental Therapeutics.

3. It is advisable also to subscribe to the *Journal of the American Dental Association*, costing \$5.00 per year. Information published monthly in this journal by the Council on Dental Therapeutics is very helpful to the pharmacist.

Subscriptions for 2 and 3 should be sent to the American Dental Association, 212 East Superior Street, Chicago, Illinois. Additional books on dentistry of interest to the pharmacist will be mentioned in later articles.

4. Ninety-six per cent of the dentists answering a questionnaire in six states said they would attend a series of lectures on official medication if such were made available. These lectures should be arranged for and presented by some well-informed pharmacist or by a staff member of a pharmacy college. Your own dentist will be glad to aid in making the necessary contacts.

5. Request the aid of a college of Pharmacy in your state in these activities. Their help and advice can be of inestimable value.

It will be helpful if the state pharmaceutical associations will arrange to have a professional exhibit at the annual convention of their state dental society and to have pharmacists address these meetings on scientific subjects. Articles written by pharmacists should appear in the state dental journal. Suggestions will be given for exhibits and addresses.

Local associations and branches of the AMERICAN PHARMACEUTICAL ASSOCIATION should arrange for joint meetings with dentists. A display and speakers from both professions will be helpful.

Official Medication of Interest to Dentists

Dentists prefer to use U. S. P. and N. F. drugs and preparations. Several special dental formulas are now in the official books. No doubt others will be added so that these official books may render as great a service to the dentist as they do to the physician.

Progress in presenting information on official medication to the dentist is steadily advancing. About one-third of the colleges of pharmacy and over one-half of the states through pharmaceutical groups are already giving educational programs.

The alert professional pharmacist will find many opportunities to serve the dental profession. Dentists from many parts of the United States have requested information about prescription writing and dental formulas. Recently six letters from California were received asking for dental formulas as the result of a display by the AMERICAN PHARMACEUTICAL ASSOCIATION and an address by a member of the California University College of Pharmacy given before the Golden Gate Dental Congress held at San Francisco. This same experience has been duplicated in widely separated parts of the United States. Coöperation with the dental profession is no longer a local activity confined within one particular state, but is national in its scope. The intensity of the work with the dentist in some of the states may not be as great as that in others and this series of articles is intended to assist in improving the programs.

Eight years ago a county dental association requested a College of Pharmacy to give a course in prescription writing and Materia Medica to practicing dentists. So much interest developed from this course that it has been repeated yearly with an average attendance of about 60 dentists. These subjects have been taken up by study groups, and now several instructors for this purpose are lecturing to dental groups throughout the state. Similar instruction is being given in several states. When dentists request such a service and are willing to give their time to study courses and clinics on Materia Medica and prescription writing, this should be proof enough of the demand for the professional services of the pharmacist.

Pharmacists Can Coöperate with Dentists

No one is in a better position to supply the drug needs of the dentist than is the alert, interested pharmacist. Once the pharmacist establishes himself with the dentist as a

source of professional information the dentist will turn again and again for consultation and advice. A number of dentists were asked recently why they wanted to prescribe. They said that when drugs are indicated, they should be prescribed and used in a professional, scientific manner and that the only correct way to give such treatment is to prescribe for the individual needs of the patient, which should be determined by the disease under consideration and the condition of the patient.

Official medication lends itself admirably to such treatment, for the dentist always knows what he is prescribing. He can govern the ingredients of the prescription and control the dose as the circumstances warrant. The dentist knows that accidents and improper medication are not liable to happen when he writes a prescription for he has the assurance of a double check on the prescription before the patient receives it. One of the main reasons for writing a prescription is that it may be compounded by a skilled pharmacist, specially trained, and for the check on ingredients and dose to which the patient is entitled to assure the greatest safety.

The pharmacist should supply the drugs for the dentist's office as well as compound prescriptions for the patient's use. The dentist should be entitled to the same professional courtesy and attention as is shown other prescribers. Many of the preparations the dentist uses in his office he pays much more for than he would if the same medication were furnished by the pharmacist on a prescription.

The pharmacist is already well equipped to tell the dentist many things he desires to know about medication, but the general knowledge of the pharmacist should be supplemented by reading at least such books as "Accepted Dental Remedies" and *The Journal of the American Dental Association*.

It is hoped that interested pharmacists will prepare now to make use of the information and the formulas to start in the February issue of *THIS JOURNAL*. The formulas will also appear monthly in the *Journal of the American Dental Association* for the information of the dental profession.

The Spring Clean-Up Campaign*

By Paul Tarrant†

In order to give a complete and comprehensive picture of this Clean-Up Campaign the background of our organization should be given. The Birmingham Retail Druggists Association was organized in the fall of 1931 by a small group of far-sighted, progressive, independent retail druggists and from the very first the membership was limited to those actively engaged in retail pharmacy. At that time the Birmingham druggists, similar to those in many large cities, were barely acquainted with each other and all were bitter in their complaints against the chain store operators.

Within less than two years after the Board of Retail Druggists Association was organized the group had grown from thirty-five or forty members to more than one hundred and twenty-five, and nearly all of them were well enough acquainted with each other to be greeted by their first names at the semi-monthly business luncheons. The head of one of the largest chain groups was a member of the Board of Directors and had become a member by a vote of the body as a whole. These facts are to show the friendly and constructive work that has been accomplished through this organization and which has meant so much in many ways to the druggists of Birmingham and Alabama as well as to the profession as a whole. The Birmingham druggists in a period of less than two years became friendly, coöperative competitors working together for the common good of the majority rather than as strangers across the street from each other.

One of the first official acts of the B. R. D. A., after drawing up the Constitution and By-Laws was the adoption of a Code of Ethics, from which the following paragraph is quoted:

"The pharmacist should maintain at all times a neat and sanitary store, paying

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

† Birmingham, Ala.

strict attention to the appearance of his prescription department. He should keep from his store all objectionable practices and persons."

One of the first standing committees to be appointed was the Physicians' Relations Committee, for the purpose, as the name would indicate, of promoting better relations between doctors and druggists. As a part of its program the committee sent a copy of the Code of Ethics, which was compiled in a Yearbook with the Membership Roster, to all members of the Jefferson County Medical Society and of the Birmingham Dental Association. This practice has been followed each year, and, with additional contacts between the three groups, has brought splendid results.

The paragraph of this Code of Ethics quoted above emphasized the appearance of the drug store and particularly of the prescription department. This paragraph and the evident necessity for a "clean-up" in most of the stores gave the Physicians' Relations Committee the idea of a Clean-Up Campaign. This was about the end of the depression that some of you old-timers may remember, when the whole country was "down in the dumps," when the majority of the retail drug stores appeared to be getting a little "dumplier" than the rest for lack of interest as well as funds. The morale of the druggists was at a low ebb and most of the stores reflected this spirit. The committee realized that there was little money available at that time for painting or remodeling of stores but believed that with some special incentive the B. R. D. A. members could be encouraged to use some elbow grease, soap and water, to a good advantage. The idea was presented first to the Board of Directors for approval and later to the members at an open meeting where it was approved unanimously.

Spring time has long been synonymous with clean-up time and on March 1, 1935, the first B. R. D. A. Clean-Up Campaign was opened. The basis of this campaign was not to spend money on new equipment or remodeling but simply for each member to make the most of what was on hand by rearranging, cleaning and polishing up the

store. As a special incentive to members, the committee decided to award a loving cup to the store that received the highest grade in the campaign, and to the next high winners in each section of town, namely, North, East, South, West and Downtown, a decorative certificate of merit which could be framed and hung in the store.

Inspection Chart

The Physicians' Relations Committee drew up an Inspection Chart, which was and still is very simple. The total number of points that could be earned by a store was set at one hundred. Of the fifty points devoted to the prescription department, which has been emphasized in each campaign, twenty points were for cleanliness, ten points for general appearance, ten points for condition and quality of biologicals, chemicals and pharmaceuticals and ten points for the condition of the narcotic, poison and other records: of the twenty-five points for the soda fountain, fifteen points were for cleanliness of equipment and ten points for the appearance and cleanliness of the dispenser; of the remaining twenty-five points, fifteen points were for general appearance and arrangement of store interior, five points for general outside appearance and five points for neatness and appearance of the store personnel.

The Physicians' Relations Committee served as the Inspection Crew on the first check-up, eliminating according to the grades made until the three high stores in each section of town remained. For the final inspection the committee was augmented by a committee from the Jefferson County Medical Society. The first campaign was a humdinger. The druggists got busy and cleaned and polished and rearranged their stores from front to back. Many of them worked until two or three o'clock in the morning. Some of the bottles, merchandise, etc., taken off their shelves had probably been there since the War, not saying *which* war. After getting started they were worse than fussy housewives and cleaned the whole place out. The results were astonishing. Some of the stores were so improved that members of the committee

found it hard to recognize them and practically every prescription department had been improved 100%. The winner in the 1935 campaign was Alley's Drug Store No. 7, a chain store, which was another point in favor of this democratic organization.

Annual Association Project

This first Clean-Up Campaign proved so interesting and successful from every standpoint that the Birmingham Retail Druggists Association voted unanimously to adopt it as an annual association project to be conducted under the supervision of the Physicians' Relations Committee and it was decided that the loving cup should become the permanent possession of any member whose store won it for three years in succession.

The campaign has been conducted on the same principle each year with a few variations. The second year the committee secured the coöperation of several prominent pharmaceutical houses, contributed valuable articles to be used as prizes and grew so interested in the reports that they continue to coöperate each year. We are, indeed, grateful to these manufacturers for their coöperation. A Grand Prize was established, which included the loving cup and valuable chemicals for the store making the highest total grade in the city. A "runner-up" prize and a prize for the winner in each section of the town, after the first two mentioned, were provided. The winner in 1936 was the Thomas Jefferson Drug Company, an independent store.

In 1937, an entrance fee of \$1.00 was charged and the fund thus collected was awarded to the employees of the two highest ranking stores. This created an unusual amount of interest and made the employees, from the registered pharmacist on down to the soda-boy and the porter, feel that they were a vital part of the campaign.

In 1937, 1938 and 1939 Fadely's Drug Store No. 2, a Rexall Store, won the loving cup or Grand Prize which gave permanent possession of the original cup and a new trophy will have to be offered for the 1940 campaign. Singleton Drug Company, it is interesting to note, was the runner-up for

the grand prize for 1937-1938 and 1939 and the grades of these two stores varied only about a point and a half each year.

Purpose of the Campaign

This annual Clean-Up Campaign was inaugurated to help the druggists themselves, to create better relations between physicians and pharmacists and as a general good-will builder. It has attracted more attention than any project attempted by the association. The most unusual thing about these campaigns has been the spirit of the druggists themselves. They are willing to permit their fellow-druggists and competitors to inspect and check their stores from front to back, inside and out, and they give the inspectors a cordial welcome. Two or three members became disgruntled when their stores did not win and declared the judges were not as impartial as they should be. As soon as one of these raised his voice he was added to the Inspection Committee so that he could see exactly how it was done. Each inspector turns in a separate chart for each store to the secretary of the association who sorts them and averages the grades of the stores. These grades are then checked by the chairman of the Physicians' Relations Committee. Only the grades of the winners are announced but all other members are invited to visit the office and study their grades so that they may know how to improve their store before the next campaign.

The B. R. D. A. is thoroughly sold on the "Spring Clean-Up" and while our stores are far from perfect we do know that these campaigns have made the majority of the members more conscious of the appearance of their stores. Those stores that have entered in the campaign each year have shown a steady growth in their merchandising program as well as their prescription practice.

The publicity about these campaigns from both local papers and national drug journals has been of the highest type. The landlords and the customers of the individual stores became interested and watched the progress of the campaigns. Some went so far as to offer suggestions to the druggists about improving their stores. In several

instances the druggist was able to get the landlord to "loosen up" and apply a fresh coat of paint or build a new window for the building. Of course, the winners in these campaigns made the most of their opportunity by announcing to their customers that they had won the B. R. D. A. loving cup.

As chairman of the Physicians' Relations Committee since its inception it has been my privilege to help conduct these Clean-Up Campaigns and it is gratifying to know that the most progressive stores in every respect are those which have taken advantage of this idea to attract the attention and goodwill of the doctors and the customers.

The inspection of the stores in these campaigns takes from a week to ten days and is really a job. It has proved a real pleasure to serve on this committee because the work has brought such worth-while returns to all who have taken part in it and we are thoroughly in accord with the sentiment expressed by the late Theodore Roosevelt, who said, "Every man owes at least a part of his time to the upbuilding of his profession." No better opportunity is offered the professional man, or merchant, for the upbuilding of his profession, or business, than his membership and active participation in his own Association.

Committee on Professional Relations

By C. B. Jordan, Chairman

The work of this committee starts off with a "bang." In fact, it is piling up so rapidly, that the chairman contemplates employing two extra stenographers in order to keep up with it. Before the chairman had opportunity to consult his committee he received from a state professional group the following recommendations:

"WHEREAS, the Practice of Pharmacy in America for quite some time has found itself in a state of confusion, and

WHEREAS, it appears that Pharmacy has been misled and has been chasing idle fancies held out by those other than pharmacists, and

WHEREAS, there seem to be on foot, movements or some spontaneous combustions, by groups of men

in Pharmacy throughout our country, all of which are designed for the same mutual benefit of pharmacists of America, and

WHEREAS, there seems but little doubt that American Pharmacy is at last interested in restoring Pharmacy to the place of greater public appreciation, through its own efforts, and

WHEREAS, we have reached the place where a united and desirable leadership, all under a common banner labeled American Pharmacy, is highly desirable and in fact necessary within reasonable time, and

WHEREAS, the foregoing statements illustrate the vast need of proper leadership in promoting Professional Pharmacy, and that the AMERICAN PHARMACEUTICAL ASSOCIATION with resources, prestige and an honorable record, is the proper body to furnish this leadership, and develop plans for the furthering and lifting of Pharmacy to a higher plane,

Now, therefore, be it resolved by the Professional Relations Committee of the West Virginia State Pharmaceutical Association, in meeting assembled this 21st day of September 1929, in the City of Clarksburg, West Virginia, that the following recommendations be made to the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION:

1. That the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION shall act as a clearing house, and disseminate information to all the states from those states now carrying on programs of this nature regarding this work as done by them.

2. That the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION correlate the efforts of the several states, give study to them with the idea of developing a program promoting the use of official medicines, which program could be used on a national basis. If not practical from a national standpoint, may be secured by the various state associations, city or county organizations, or even an individual in cases where no other organization is doing this work in his city, county or state; this to be supplied at a nominal cost to those interested.

3. That the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION devote its efforts to the developing and making available to its members in the retail trade:

- A. Professional Window Displays, depicting Professional Pharmacy and Medicine to the general public.

- B. The development of Radio transcripts which are suitable for use by an individual or group to further build greater public appreciation for Professional Pharmacy and Medicine.

- C. The development and producing of a booklet embracing the subject "How to Detail Physicians on Official Drugs and Medicines."

- D. The development of an up-to-date booklet embracing "Official Medicines" which is suitable

for distribution by retail members or by organized associations engaging in this work.

4. That the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION proceed at once to investigate the possibility of building up a program embracing all the foregoing recommendations, and, in addition, give thought to the idea of incorporating into such a program a means or method by which drug stores or pharmacies may be classified; the better stores given something to distinguish them from the class of store which is not interested in Professional Pharmacy. Such a classification being brought about by a rigid setup of requirements open to any and all who can meet the regulations, and rigid inspection, after which they be entitled to some sort of identification such as "Member of the A. Ph. A." under which is inserted the word "Approved" or "Certified" or some sort of wording that is satisfactory. That in drawing up such a program the rules and regulations be made flexible enough to permit the recognition and entry of men of high character and professional reputation in large and small towns alike, yet requirements shall be rigid enough, and services made available to the members be good enough, that it is something to be desired and will be sought after by men in the retail practice of Pharmacy.

Be it further resolved, that a copy of these recommendations be forwarded to the entire membership of the Professional Relations Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION, the President and Secretary of the same association, with the hope that by June of 1940 when the West Virginia State Pharmaceutical Association holds its next annual convention we shall have something definite to tell them about this work to build a greater public appreciation for Pharmacy, and the promotion of better Professional Relations between American Medicine and Pharmacy. Also, we hope that we can report that this entire movement is under the banner of, sponsored and controlled by American Pharmacy, through the medium of close coöperation between the various state associations, but directed generally by the AMERICAN PHARMACEUTICAL ASSOCIATION through its Committee on Professional Relations."

What a task to set before *one lone* committee! Your committee is entirely in sympathy with the above resolutions but believes it will take "quite some time" to accomplish all of this—say two years or more. However, we have attacked the problem and have been encouraged by the response. Evidently there is a great deal of interest aroused in professional relations and we hope that something can be done this year to further this interest and to unify some of the efforts that are being made by state associations and others to

further better professional relations with our sister professions. In particular we hope to arouse an interest in this work in those states that do not now have a professional relations committee at work.

The first activity of the committee will be an effort to contact the professional relations committees of the state pharmaceutical associations and secure from them a brief report of their activities. It is hoped that these reports can be condensed into eight or ten sentences and be printed in this JOURNAL. The purpose is to show what is being done in the individual states in hopes that the state pharmaceutical associations that are not active will awaken to the importance of strengthening professional relations. These reports will, we believe, point the way to the method of procedure.

In addition, your committee will contact such individual groups as those represented in Detroit, New York and Philadelphia and ask for a brief report of their activities. The academies of pharmacy, such as the one in Cleveland, will also be contacted for the same purpose.

Your committee is also contacting a similar committee of the American Association of Colleges of Pharmacy headed by Dean Schicks of New Jersey, in hopes that some method of coöperation can be worked out, since the A. Ph. A. Committee and the A. A. C. P. Committee are both endeavoring to do the same work.

Reports have already been received from the following states: West Virginia, Iowa, Indiana, New Jersey, Wisconsin, New York, Mississippi, South Carolina, Washington, Texas, Ohio, Florida, Colorado and North Carolina. Obviously it will be impossible to print abstracts of all of these reports in this issue and therefore some will be held over for following issues.

Mr. W. J. Danforth, Secretary of the Texas Pharmaceutical Association, reports as follows:

"Probably the greatest achievement of this committee during the past year, was the incorporation in the new Medical Practice Act for the State of Texas, an amendment which will make it unlawful for any person other than a registered pharmacist to sell or offer for sale, contraceptives, contraceptive

devices or prophylactics or medicines which they recommend for the cure of disease. This is most certainly a step forward in bringing about a definite degree of understanding between the different professions interested in the practice of Medicine. The Medical Association saw fit to recognize Pharmacy and the endeavors of the pharmacist to correct many of the unethical practices which were prevalent. The State Medical Association of Texas has been very coöperative with the Texas Pharmaceutical Association, electing each year a delegate to the Texas Pharmaceutical Association, the pharmacists doing likewise by electing a delegate to the medical convention. Next year will no doubt find both the doctors and druggists joined mutually in a primary legislative campaign, uniting for the betterment of all concerned."

That's the way to get action.

Mr. Charles E. Wilson, Director of U. S. P. and N. F. Division of Extension, Mississippi State Board of Pharmacy, writes:

"Recently I have had the opportunity to read a copy of resolutions adopted by the West Virginia Professional Relations Committee concerning the promotion of Professional Pharmacy.

These resolutions appear to be the result of some sincere study on the part of that committee and they have more sense packed into them than most resolutions. Personally I would like to approve them and ask that serious consideration be given them and would like to see them carried out by your committee.

Working under the mentioned resolutions should be one way in which something could be accomplished by the A. Ph. A., instead of having several more or less local organizations trying to do the same job, certainly a unified action should be in a position to do a better job."

That's the spirit we like to see shown by a State Board of Pharmacy. "More power to your elbow," Mr. Wilson.

Mr. H. H. Jones, President of the Mississippi State Pharmaceutical Association says:

"I have read the copy of resolutions adopted by the West Virginia Professional Relations Committee in regard to the promotion of Professional Pharmacy which I enjoyed very much.

I wish to state that I approve these resolutions and think they are very important to us. I think that all the state pharmaceutical associations should put on a professional advertising campaign of very high type to the doctors and to the public. This can be done only with one central head and it looks to me as though the AMERICAN PHARMACEUTICAL ASSOCIATION should be this head.

This is the first year I have been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION, but I am going to be a member from now on "

Another enthusiastic A. Ph. A. member. Hope we meet you, Mr. Jones, at Richmond, in May 1940.

Your committee is extremely anxious to receive suggestions as to how it can best function for the improvement of professional relations and every pharmacist and pharmaceutical educator is hereby requested to send such suggestions to the chairman.

The Pharmacist and the 1940 Census

The Sixteenth Decennial Census which began on January 2nd will, in one or another of its phases, touch every person in the United States. For pharmacists, however, it will be particularly important because of its direct bearing on vital aspects of their profession.

Every pharmacist operating a drug store will be called upon to supply figures in the Census of Business, the first in four years, which is now under way. Wholesale drug concerns will also be covered in this survey, while producers will report in the Census of Manufactures, being conducted simultaneously. Then in April the big Population Census, which is taken every ten years, will collect information on all pharmacists.

Out of these canvasses will come facts of great value to the profession, which will more than recompense for the small amount of time spent in answering Census questionnaires.

Take the inquiries of the Business Census, for example. A Business Census enumerator will bring a schedule to every drug store in the United States, and collect it when filled out. On this form appears a limited number of questions, all designed to produce information useful to those reporting.

Commodities Distributed

Perhaps most important to pharmacists is the analysis of commodity sales, in which total dollar value of prescriptions is to be ascertained, in comparison with total sales of drugs and medicines, drug sundries and rubber goods, toilet preparations, liquors, beer and wine, cigars, cigarettes and tobacco,

candy, and meals and fountain-dispensed items.

The totals will be shown separately for drug stores with fountains and for those without, giving interesting evidence of any trend toward or away from the exclusively pharmaceutical establishment.

Another significant question being asked concerns employment and payroll. Number of pharmacists employed will be determined, and their compensation, for a typical week. Similar data will be obtained for clerical help such as cashiers, sales clerks and fountain dispensers, and waiters and waitresses.

Stability of drug stores will be measured by answers to questions on date of original establishment and date of acquisition or establishment under present ownership.

Light will be thrown on the problem of inventories by tabulation of data on cost value of stocks at the beginning and end of the year.

Relative number of independents and chain units will be found through a question on type of operation. This and other data will be shown for states and cities, giving pharmacists valid standards for their localities, by means of which they can evaluate their own performance.

Commodities Produced

Detailed figures on volume of commodities produced will be made available through the Census of Manufactures. Producers will report output of all major types of drugs and medicines, separating each between those sold direct to or prescribed by physicians, and those packaged for sale to the general public. There is a further differentiation between U. S. P. or N. F. preparations and others.

For example, the report for 1937, the last year covered by a Manufactures' Census, shows the following totals for liquid preparations such as tinctures, syrups, etc.: Sold direct to or prescribed by physicians, U. S. P. and N. F., \$9,494,975, and special formulas, \$18,949,518; packaged for sale to the public, U. S. P. and N. F., \$13,419,609, others, \$61,890,075. The pharmacist can profitably examine his records in the light of these ratios.

Number of Pharmacists and Salary Scale

Turning to the April Population Census, pharmacists will be glad to learn that it report on occupations will for the first time list separately the number in their profession, wherever they may be employed. Previously, most pharmacists were included among retail dealers in drugs and medicines, while those in hospitals, factories and elsewhere were grouped in miscellaneous classifications with other types of employees.

The Population schedule will contain a new query on wage and salary income, as a result of which it will be possible to see the average salary for employed pharmacists.

In giving such personal information to the enumerator, the pharmacist is protected against disclosure of individual returns, or their use for taxation, investigation or regulation, by the same Act of Congress which requires reporting to the Census Bureau.

Promptness and accuracy in making returns will help the Bureau make available at the earliest possible date the information which most interests pharmacists.

The basic facts, it is expected, will be published by late summer or early fall, with special trade reports to follow.

Alcoholic Content of Pharmaceutical Preparations

The accurate determination and correct statement of the alcoholic percentage of these products is of great importance because of its relation to their cost in many instances and also because of the labeling requirements in the Federal and State Food, Drug and Cosmetic Acts. The A. P. H. A. Laboratory, working with the N. F. Subcommittee on Extraction Preparations is now studying the official method for determining alcoholic content and the preliminary results indicate that the apparatus and technique should be improved. The work will be continued with the expectation that a definite report can be submitted later on, leading to a more accurate method.

Chairman Committee on National Formulary and Director A. Ph. A. Laboratory Elected

Dr. Justin L. Powers of Ann Arbor, Mich., was elected to this combined position by the Council of the ASSOCIATION at its semi-annual meeting in Washington on December 3, 1939, upon the recommendation of a Committee appointed at the Atlanta meeting to select a candidate for the position. He succeeds Dr. E. N. Gathercoal who has been Chairman of the N. F. Committee since 1929 and Director of the Laboratory since it was established in 1935, and who requested to be relieved when the other members of the Committee on N. F. were elected last August. Dr. Gathercoal will continue in an advisory capacity until after the A. Ph. A. meeting in Richmond, in May.

Dr. Powers will give his full time to the position and will have his headquarters in the American Institute of Pharmacy in Washington, after March 1, 1940. This election marks another step in the ASSOCIATION's program to set up the most efficient organization possible for the revision of the National Formulary and for the direction of the Laboratory.

Dr. Powers was born in Tekonsha, Mich., on March 12, 1895 and was a student in Hillsdale College, Hillsdale, Mich., in 1914-1915. He then entered the College of Pharmacy, University of Mich., and continued his studies there until October 1917 when he joined the U. S. Army as a Sergeant, Medical Department, Field Hospital, No. 22, Fort Oglethorpe, Ga. From February to September 1918, he was with the Medical Detachment at Kelly Field, Texas, and was then admitted to the Infantry Department, Central Officers Training School, Camp Pike, Arkansas, from which he was discharged at his own request on November 27, 1918.

Dr. Powers resumed his studies and received the Ph. C. degree from the University of Michigan in 1919. He was Instructor in Pharmacy, School of Pharmacy, Washington State College, Pullman, Wash., until 1923 when he returned to Michigan as pharmacist to the University Health Service and as a student. He received the Bachelor of Science degree in 1924, and until 1926 was Assistant Professor of Pharmacy in the School of Pharmacy, Oregon State College, Corvallis, Oregon, when he again returned to Michigan as instructor in Pharmacy and student in the Graduate School, receiving the M.S. degree in 1927.

From 1931, Dr. Powers has served as Assistant Professor of Pharmacy, University of Michigan, except from June 1934 to August 1935, when he was on leave of absence at the University of Wisconsin from which he received the degree of Ph.D.



JUSTIN L. POWERS

Dr. Powers is a registered pharmacist in Michigan and Washington and has had experience of a varied nature in retail and hospital pharmacies and in the Army.

A number of scientific and professional papers have been published by Dr. Powers. He was co-reviser with Dr. C. H. Stocking of the 6th Edition, Stevens Arithmetic of Pharmacy and assisted Dr. W. L. Scoville in the 6th Edition of the Art of Compounding. He served from 1937 to 1939 as a member of the Pharmacy Study Commission appointed by Governor Murphy.

Dr. Powers is a member of the AMERICAN PHARMACEUTICAL ASSOCIATION, the American Chemical Society and of the following societies and fraternities: Phi Delta Chi and Rho Chi (pharmaceutical), Phi Lambda Upsilon (chemical), Sigma XI (general scientific), Phi Sigma (biological) and Delta Tau Delta (general social). He has served on a number of committees of both the A. Ph. A. and the A. A. C. P.

Dr. Powers and Miss Gladys L. Laufman of Chattanooga, Tennessee, were married in that city on December 22, 1917.

Dr. Powers brings to the important work he is undertaking unusual ability, training and experience.

American Association for the Advancement of Science

The annual meeting of this representative organization of American scientists was held in Columbus, Ohio, December 25 to 29, 1939. The Section on Medical Sciences, in addition to its joint sessions, held separate sessions for physicians, dentists and pharmacists. The Sub-Section on Pharmacy held two sessions on December 27th with an attendance of about fifty persons. Dr. Glenn L. Jenkins of the College of Pharmacy, University of Minnesota, Minneapolis, Minn., was the chairman. Ten papers were presented and discussed.

The selection of drug clerks on the basis of specific traits thought to be desirable and which determine their success was discussed by Prof. C. M. Brown; the tests used and the methods of scoring were reported. Of thirty-five desirable traits previously selected, all of the strictly professional requirements were rejected and the remaining ten were used in this study. An effort is being made to determine their relative value.

An improved method for determining peptic activity based on the use of casein was outlined in detail by Dr. C. J. Klemme and Lee F. Warrell. It was found, however, that different lots of casein caused short variations in the results secured.

Dr. Leroy D. Edwards reported on a study of the irritant action of potassium and sodium soaps made from fatty acids, alkyl sulfates and refined oils. A modified patch test was used which permits a contact of the soap solution with human skin. The results were summarized as follows:

Fatty Acids—Most Irritant—Lauric, Myristic

Alkyl Sulfates—Most Irritant—Luryl, Myristyl

Refined Oils—Most Irritant—Cocoanut

Dr. J. L. Powers, in a paper on "The Chemistry of the Viburnums," gave reasons to believe that both viburnums contain alkaloids. Dr. J. C. Munch in reporting on "The Uterine Sedative Action of the Viburnums," cited evidence that *Viburnum prunifolium* has a sedative action on the uteri of animals as well as humans.

Aconitine is the principal analgesic constituent of aconite according to evidence submitted by Drs. B. V. Christensen and W. Nelson, and since the chief use of aconitine is based on its analgesic effect it was suggested that a biological assay might be based on its analgesic constituents.

The use of oral vaccine as a preventive agent was shown to reduce the incidence of common colds forty to sixty per cent in the cases studied by Dr. Leonard J. Piccoli. It was also shown that the colds contracted by those who took the oral vaccine were mild and of short duration.

Drs. R. L. McMurray and R. D. Little reported on a study of Horse Nettle Berries showing the presence of alkaloids and a complete analysis of the ash.

Dr. Richard A. Deno outlined a basis for distinguishing between virgin and parous animals through brown spots which are a prominent feature of the involution of the uterus in certain parous rodents. In rodents which show these spots, animals of unknown origin can be certified as to virginity.

That mandelic acid, the well known urinary antiseptic, yields with methenamine a salt that is nontoxic when given orally to rabbits and which showed marked antiseptic activity in urine by *in vitro* tests, was reported by Dr. Glenn L. Jenkins.

These meetings are valuable since they provide the opportunity of acquainting the scientists of the country with the scientific work done in Pharmacy.

A Guide to the Pricing of Prescriptions*

By W. Paul Briggs†

This pricing plan was originally intended to supply students and newly registered pharmacists with a simple method of establishing reasonable prescription prices. The plan has been subjected to a limited

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

† George Washington University, School of Pharmacy.

amount of practical drug store use and, in the main, has been found satisfactory.

The Average prices given in the Regular Schedule were obtained by a careful survey of 3000 prescriptions filled in seven representative pharmacies in Washington, D. C., during January 1939 and were then checked against prices charged by other representative pharmacies including a store belonging to a large chain drug company. The very nature of prescriptions makes an average price a doubtful factor but safeguarded as it is in this system, some of the weaknesses are overcome and the values utilized.

The average price of the prescriptions in this survey was 92 cents. The survey further showed that 25% of the prescriptions were for single proprietary products; 1.5% for mixtures of proprietary products; 25% for mixtures of proprietary and non-proprietary products; 13% for single non-proprietary products; and 35.5% for mixtures of non-proprietary products. A breakdown of the prescriptions for mixtures of proprietary and non-proprietary products showed that 68% of the ingredients of these prescriptions were for non-proprietary items. This means that approximately $\frac{1}{4}$ of all prescriptions can be priced under Instructions 3, 4 or 5, whichever applies, and the remaining $\frac{3}{4}$ can be priced by the Schedule, with the occasional application of Instruction 1.

Most prescription pricing systems use a formula of some type in which cost of ingredients, profit, container, etc., are determined, to which is added a compounding or professional fee. These factors represent the essential basis for the pricing of prescriptions. The profit, in terms of a commodity sale, and the compounding fee for professional services rendered, are, whether we like it or not, adjusted to what the traffic will bear and the influence of competition. People do shop for prescriptions, and most charges are far too low when the character of the professional services supplied is considered. Let me say that I do not approve of 25 cent prescription prices. I hope to see the day when pharmacists will receive a definite professional fee for services ren-

dered, and, in addition, a separate charge for the prescription as such.

Conditions as they exist must be considered while striving for future improvement. Under several pricing systems it has been found that in many cases the minimum price becomes the average price. This is so because the actual cost of ingredients (proprietary excepted) is usually a negligible factor. In this plan, the roundabout method of applying a formula and then charging the minimum price has been changed so that an average price is charged unless one or more ingredients are expensive.

It is impossible to define an average prescription for which an average price might be established. A prescription for Aspirin, Caffeine, Phenyl Salicylate, etc., in capsules would have a negligible ingredient cost as would mixtures containing Ammonium Chloride, and Syrup Wild Cherry; or containing Sodium Bromide, Tr. Belladonna and Elixir Lactated Pepsin; an ointment containing Ichthyol, Zinc Oxide and Petrolatum; a suppository containing Tannic Acid, Ext. Hyoscyamus, Cocoa Butter; a bulk powder containing Magnesium Oxide, Kaolin, Sodium Bicarbonate; or an eye drop containing Zinc Sulfate and Sat. Sol. of Boric Acid. These prescriptions represent relatively inexpensive combinations which do not involve unusual technique or require excessive time for compounding, and could be priced by the Schedule. Many proprietary items and relatively expensive official items could be included in the above, or similar, combinations, and still be profitably priced by the Schedule. It is only necessary to observe that if the cost of any ingredient equals or exceeds $\frac{1}{6}$ of the Schedule price, such cost should be added to the Schedule price. For example, in the first combination for one dozen capsules, with a Schedule price of 75 cents, assume the addition of 6 grains of Codeine Sulfate. If the Codeine Sulfate costs 3 cents per grain the total cost of the Codeine Sulfate used would be 18 cents, which is more than $\frac{1}{6}$ of the Schedule price, and this amount would therefore be added to the Schedule price, making a total of 93 cents. This would be increased to the next higher number di-

visible by 5, making the actual price for the prescription 95 cents.

The Minimum price in this plan is entirely different in meaning and application from that in other pricing systems. It is intended solely as a floor and should be used only in exceptional cases. If 1 ounce of Zinc Oxide Ointment is sold for 25 cents and 75 cents is charged for the same item on a prescription, the criticism that our prescription prices are exorbitant is given validity. Aspirin capsules are probably sold for 25 cents or 35 cents per dozen and if 75 cents per dozen is charged for this same item on prescription, the apparent gain in cash becomes actual loss in confidence and good-will. When no compounding is involved, when the product is inexpensive and when it is commonly known to the public, the use of the Minimum price, increased whenever possible, is suggested. Prescriptions for Dobell's Solution, Milk of Magnesia, Ointment of Boric Acid, Quinine Capsules, Antiseptic Powder, etc., illustrate types in which the Minimum price might be used.

In cities such as Washington most pharmacists have been forced to charge prevailing retail prices, raised to the next highest even number, for original quantities of single proprietary items when dispensed on prescription, and this policy is suggested to meet competition and to avoid charges of profiteering. If a proprietary item has no retail price, a 66% mark-up (or 40% gross) is suggested when the original size is dispensed. This means, -in most instances, selling at list price. Many such items introduced as so-called ethical specialties later become common over-the-counter items, and any marked difference in price when furnished on prescription jeopardizes the profit to be made on compounded prescriptions. A policy of charging 90 cents on prescription for an article which is frequently sold over the counter for 89 cents and which costs 75 cents should be followed only if necessary. In the above case no compound-

ing fee would be charged even though the responsibility and work are greater than are called for by a simple retail sale. The object of such a policy is to preserve an understandable and reasonable balance between prescription and retail prices for the same article since in the minds of the public, such a transaction involves no professional service and is merely a commodity sale. All prescriptions should be dispensed in prescription containers whenever possible, and this practice will, to some extent, modify the necessity for observing over-counter prices in the pricing of such prescriptions. The over-the-counter price should be observed only on items which are sold over the counter in the particular store and should not be observed on every item which may have an over-the-counter price in some other store.

The remainder of the Pricing Plan is self-explanatory. There may be many faults and some cases may not have been covered due to the effort to preserve simplicity, but if the general approach to consistent and profitable pricing of prescriptions has been furthered, the effort will be justified.

In conclusion, let it be forcefully stated that prescription prices, in general and in this plan, are far too low and are not in accord with the professional skill and responsibility involved in the vital services which pharmacy renders to the public; that a 25 cent minimum price for any prescription is an indignity to the individual pharmacist and a challenge to the profession of Pharmacy; and that even in the case of those ready-made preparations which are simply re-labeled by the pharmacist, a professional charge should be willingly paid in view of the knowledge, skill and responsibility involved. The purposes of this Plan are: (1) to suggest a policy through which competitive prescription prices can be met; (2) to insure a reasonable profit on every prescription; (3) to avoid actual losses due to faulty pricing; (4) to provide for consistent pricing in any one pharmacy.

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REGULAR SCHEDULE

Average Price Includes Costs, Profit, Container Charge and Professional Fee

Volume or Weight	Number	Internal Liquids (One Dram Dose—2 or More Doses per Day)		External Liquids (Lotions, Gargles, Injections, etc.)		Ointments		Capsules, Papers, etc. (One per Dose—2 or More Doses per Day)		Powders, Bulk (One Dram Doses) (Calculate Price on Volume)		Suppositories		Eye, Ear, Nose Drops Internal Liquids (Drop Doses)	
		Avg.	Min. ⁴	Avg.	Min. ⁴	Avg.	Min. ⁴	Avg.	Min. ⁴	Avg.	Min. ⁴	Avg.	Min. ⁴	Avg.	Min. ⁴
2 dr.	3	...	...	...	...	0.35	(0.25)	0.35	(0.25)	...	...	0.50	(0.50)	0.40	(0.25)
4 dr.	6	0.35	(0.25)	0.35	(0.25)	0.45	(0.25)	0.45	(0.25)	...	...	0.75	(0.50)	0.50	(0.25)
1 oz.	12	0.45	(0.25)	0.40	(0.25)	0.65	(0.25)	0.75	(0.35)	0.50	(0.25)	1.25	(0.75)	0.65	(0.35)
2 oz.	18	0.55	(0.25)	0.45	(0.25)	0.85	(0.35)	0.90	(0.50)	0.65	(0.35)	1.65	(1.00)	0.85	(0.50)
3 oz.	20	0.65	(0.35)	0.55	(0.35)	1.10	(0.50)	1.00	(0.65)	0.75	(0.50)	1.75	(1.25)	...	...
4 oz.	24	0.85	(0.40)	0.65	(0.40)	1.25	(0.75)	1.10	(0.75)	0.85	(0.50)	2.00	(1.50)	...	...
6 oz.	36	1.00	(0.50)	0.75	(0.50)	...	...	1.40	(0.75)	1.00	(0.65)	...	...	...	...
8 oz.	40	1.25	(0.60)	0.85	(0.50)	2.00	(1.25)	1.50	(0.85)	1.25	(0.75)	...	...	...	...
12 oz.	50	1.75	(0.75)	1.00	(0.65)	...	...	1.75	(1.00)	...	...	...	...	...	...
16 oz.	100	2.25	(1.00)	1.25	(0.75)	3.00	(1.50)	3.00	(2.00)	1.75	(1.00)	...	...	...	...

(If exact quantity called for is not listed, charge at rate of nearest quantity given.)

INSTRUCTIONS

1. Above prices are *Average* and subject to modification where dose varies or where one or more ingredients are very *expensive*. In general, when the *cost*² of the *amount used* of any ingredient⁵ equals or exceeds $\frac{1}{6}$ of the Schedule price *add* the *cost* of the *amount used* of such ingredient, to the Schedule price

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2. In every case where calculated price is an odd number, adjust price to the next higher number divisible by 5. If more than one calculation is required, adjust number after each calculation.

3. For all Proprietaries¹ in original manufacturers size or quantity charge *cost*² plus 66%, or prevailing over counter price, if any, whichever is lower.

4. For less than manufacturers size³ of any liquid, solid or powder Proprietary,¹ charge Schedule price, or *cost*² of quantity dispensed plus 75%, whichever is higher. If in combination, follow Schedule and Instruction 1.

5. For less than manufacturer's size³ of any Tablet, Pill, Capsule, etc., charge *cost*² of quantity dispensed plus 150% for all quantities up to and including $\frac{1}{4}$ of manufacturer's size; charge *cost* of quantity dispensed plus 100% for all quantities up to and including $\frac{1}{2}$ of manufacturer's size; charge *cost* of quantity dispensed plus 75% for all quantities greater than $\frac{1}{2}$ of manufacturer's size.

6. For double quantity or other multiples, charge initial price multiplied by multiple, less 10%.
Exceptions:

1. No reduction should be made for double quantity of original manufacturer's size unless initial charge was based on cost plus 66%.

2. For multiples of prescriptions for manufactured Tablets, Pills, Capsules, etc., base price on quantity dispensed as given in Instruction 5. If increased quantity is within same fraction of manufacturer's size as initial prescription charge initial price multiplied by multiple less 10%.

7. Minimum price for any prescription for 2 or more doses, 25 cents; for 18 or more doses, 35 cents, for 100 or more doses 50 cents.

¹ "Proprietary" includes all "Specialties," Trade Marked items, specific manufacturers product, etc.

² "Cost" means Wholesaler's price. Do not consider special discounts.

³ "Size." Where more than one size is listed, base price on cost of size nearest to quantity dispensed.

⁴ "Minimum" price should only be used in exceptional cases, such as inexpensive, ready-made items, frequently sold over counter. Increase when possible.

⁵ "Ingredient" does not include vehicle. No increase in price should be made for cost of vehicle unless such cost equals or exceeds $\frac{1}{2}$ of Schedule price. In such cases add $\frac{1}{2}$ the cost of the amount (of vehicle) used to the Schedule price.

Food and Drug Administration

Annual Report for 1939

On account of the recent enactment of the Federal Food, Drug and Cosmetic Act, the report of the activities of the Administration during the fiscal year ending June 30, 1939, is of particular interest to pharmacists. It covers thirty-two pages and copies may be obtained from the Superintendent of Documents, Washington, D. C., for five cents each.

Among the devices proceeded against were such items as lead nipple shields intended for use by nursing mothers and contrivances intended for nasal irrigation or the insufflation of medicaments into the nasal passages, so constructed as to be dangerous to the user.

New Drugs

"The new-drug section of the act provides that no new drug shall be introduced in interstate commerce unless an application has been filed with the Secretary of Agriculture establishing that it is safe for use. This section was enacted as a safeguard against future tragedies like the Elixir Sulfanilamide disaster described in the previous annual report. Drug manufacturers began to file applications June 25, 1938, and June 30, 1939; 1277 applications covering prospective new drugs were received. By the end of the fiscal year, 1107 of these had been reviewed, 683 has been made effective, 376 were pending awaiting the submission of further information and 48 had been withdrawn for further consideration by the applicants. The remaining 170 applications were received near the end of the year and are still under consideration.

"Most of the new-drug applications describe new combinations of known drugs which will cause no direct public-health injury, although in many instances it is questionable whether they possess the therapeutic properties claimed for them. Applications covering this type of new drug are promptly reviewed from the standpoint of possible injury to health and are accepted as provided by the new-drug section without delay. Where there is an indication of possible misbranding under other sections of the law because of unjustifiable therapeutic claims, the prospective manufacturer is so informed. A few of the new drugs submitted are distinctly new and possibly highly valuable. On these, very deliberate consideration is essential to determine whether applications permitting interstate traffic may safely be made effective. The act places a serious responsibility upon the Administration; no valuable drug should be unnecessarily withheld from public use;

the release of drugs without sufficient testing to establish their safety must be avoided. One application covering an important new drug called for comprehensive review by medical officers of the Food and Drug Administration of 2000 case reports recording the experiences of approximately 10 physicians. The application was eventually made effective upon the condition that the distribution of the drug should be so controlled as to guarantee its use exclusively under medical supervision. The Administration's responsibility does not end when an application is made effective. Continued observation is essential to insure proper uses and the early discovery of any harmful results in actual medical practice which may require reconsideration of the decision to permit traffic in the drug."

Dangerous Drugs

"An administrative conclusion of some moment was reached in connection with the section of the new act which defines a drug as misbranded if it is dangerous to health when used in the dosage or with the frequency or duration prescribed, recommended or suggested in its labeling. This must be considered in conjunction with another provision which requires adequate directions for use and appropriate warnings against misuse. Many drugs of great value to the physician are dangerous in the hands of those unskilled in the uses of drugs. The statute obviously was not intended to deprive the medical profession of potent but valuable medicaments. The administrative conclusion was therefore announced that dangerous drugs like aminopyrine, cinchophen, neocinchophen, sulfanilamide and related products may not be distributed for unrestricted use by the lay public without violating the statute; to insure compliance with the law, drugs of this character must be labeled with warnings so conspicuous as certainly to arrest attention and in such informative terms as will unflinchingly apprise the user of the danger of irreparable injury if the drug is consumed without adequate and continuous medical supervision. Drug distributors have generally acquiesced in this decision, and there is evidence of sincere efforts to comply with its letter and spirit. There are types of drugs once used but now known to be unsafe for use even under medical supervision. Dinitrophenol as a slenderizing agent is one of these. The Administration has indicated its purpose to proceed against dinitrophenol when represented as a drug or for slenderizing purposes wherever found in interstate commerce, regardless of any label warnings that it may carry. Surveys of the market, however, have so far failed to reveal any traffic in this drug or the related poisonous compound, dinitrocresol, since June 25, 1938."

Legal Actions

"Other legal actions included seizure of 57 consignments of non-sterile absorbent cotton, cotton swabs and dressings, representing the products of 24

manufacturers, and 11 of non-sterile sutures from 2 manufacturers. Last year 36 seizures of non-sterile cotton, cotton swabs and dressings, and 1 of catgut sutures, the output of 21 manufacturers, were made. The campaign against worthless prophylactics begun last year with 181 seizures was continued, 75 seizures being made. Prosecution was also instituted against 2 manufacturers for shipments of ineffective products represented as having antiseptic qualities."

The activities of the Administration should lead to a decided improvement in the drugs, devices and cosmetics which the pharmacists of the country distribute.

Following the period covered by the report, the Administration has also directed its attention to cosmetics and to deceptive packages and containers, especially those for tooth pastes and dental creams. With reference to the latter, it is indicated that in many cases the carton is too large for the tube or the tube is too small for the carton. Many of the leading tooth pastes and creams have been included in the seizures so far made.

Memorandum on Warning Statements Under Section 502 (f)(2)

Federal Food, Drug and Cosmetic Act

Under date of December 29, 1939, the Food and Drug Administration sent to the Chiefs of its Districts and Stations a communication from which the following quotations are taken:

"As you know, section 502 (f) of the new Act, with certain exceptions, becomes effective on January 1st. The responsibility for the labeling of drugs in compliance with the requirements is placed by the law upon the manufacturer or distributor. The Food and Drug Administration cannot relieve him of this responsibility nor share in it. Nevertheless, numerous requests for comments on proposed warning statements for certain drugs have been received by the administrative officers in Washington, as well as by our representatives in the field...

"We are appending hereto a memorandum listing a number of drug preparations with indications concerning the nature of warning statements which are not being subjected to adverse criticism for the present. This list is by no means complete, nor does it in any way mitigate the responsibility of manufacturers and distributors to comply with the requirements of section 502 (f)(2) with respect to other drug preparations not included. Neither does

the presence of proper warning statements relieve a preparation from compliance with section 502 (f)(1), 502 (j) and other sections of the Act. These comments may be modified or altered at any time as the facts may warrant."

Section 502 (f) provides that a drug or device shall be deemed to be misbranded unless it bears (1) adequate directions for use; (2) such adequate warnings against use in those pathological conditions or by children where its use may be dangerous to health, or against unsafe dosage or methods or duration of administration or application, in such manner and form as are necessary for the protection of users.

Section 502 (j) provides that a drug or device shall be deemed to be misbranded if it is dangerous to health when used in the dosage, or with the frequency or duration prescribed, recommended or suggested in the labeling thereof.

The memorandum is as follows:

Cathartic or laxative drugs (except castor oil and phenolphthalein) which act as irritants to the gastrointestinal tract or stimulate intestinal peristalsis. "Warning: Not to be used when abdominal pain (stomach-ache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present. Frequent or continued use of this preparation may result in dependence on laxatives."

Castor Oil.—"Warning: Not to be used when abdominal pain (stomach-ache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present. Frequent or continued use of this preparation may result in dependence on laxatives. Do not use during pregnancy except on competent advice."

Phenolphthalein.—"Warning: Not to be used when abdominal pain (stomach-ache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present. Frequent or continued use of this preparation may result in dependence on laxatives. Important: If a skin rash appears, discontinue use."

Roughage.—"Preparations containing so-called "roughage materials" and intended for use in constipation. "Important: All varieties of constipation are not benefited by this preparation. It should be particularly avoided in cases such as spastic constipation in which abdominal discomfort or pain may be present."

Mineral Oil.—"Preparations containing mineral oil for oral administration. "Warning: Do not take directly before or after meals."

Sodium Perborate.—"Preparations containing sodium perborate as an active ingredient and intended for local use in the mouth and throat. "W ..

This preparation may cause irritation and inflammation of the gums, tongue and mucous membranes of the mouth. It should be discontinued at the first sign of irritation or soreness. In case of doubt, consult your physician or dentist."

Nose drops, inhalants and sprays.

(a) Those that contain oil as a vehicle or base: "Caution: The use of excessive amounts of this preparation may be dangerous. Do not use at all in infants and younger children except on competent advice."

(b) Those that contain ephedrine, epinephrine, amphetamine (benzedrine), propadrine, neosynephrin and other vaso-constricting drugs of similar activity: "Caution: Frequent or continued use may cause nervousness, restlessness or sleeplessness. Individuals suffering from high blood pressure, heart disease, diabetes or thyroid trouble should not use this preparation except on competent advice."

Volatile Oils.—Preparations containing volatile oils, aromatic or drugs of an oleoresinous nature and intended for their effect upon the urinary tract. "Warning: If disturbance of the stomach or bowels, or skin rash is noticed, discontinue use."

Atropine and pharmacologically related drugs.—"Caution: Frequent or continued use of this preparation should be avoided. Discontinue if dryness of the throat, excessively rapid pulse or blurring of vision appears. Warning: This preparation should not be taken by elderly people except on competent advice."

Iodine or Iodides.—"Warning: Do not use in cases of lung disease or chronic cough, goiter or thyroid disease, except upon the advice of a physician. If a skin rash appears, discontinue use."

Carbolic Acid.—Preparations containing carbolic acid as a therapeutically active ingredient. Note: Products containing more than 2 per cent of carbolic acid are not considered safe for indiscriminate distribution. "Warning: When applied to fingers and toes, do not use a bandage. Apply according to directions for use, and in no case to large areas of the body."

Cresols, creosote, guaiacol or coal-tar derivatives intended for use as douches.—Note: Preparations intended for use after dilution should bear adequate directions for preparing solution and thorough mixing before pouring into douche bag. "Warning: The use of solutions stronger than those recommended may result in severe local irritation or burns or serious poisoning."

Cresols, creosote, guaiacol or coal-tar derivatives intended for surface application.—"Warning: Apply according to directions for use and in no case to large areas of the body."

Strychnine.—"Warning: Do not take more than the dosage recommended. Frequent or continued use is to be avoided and its use for children and elderly persons may be especially dangerous."

Anthelmintics.—The following preparations in therapeutically potent doses are not safe for indis-

criminate distribution and should only be used under the direct supervision of a physician:

1. *Carbon Tetrachloride.*—Note: Specific adequate directions for administration of a saline cathartic after use of this drug should be given. "Warning: Avoid taking castor oil or other preparations or foods containing oil or fat while this drug is being administered. The use of this preparation in debilitated children and persons addicted to alcohol is dangerous."

2. *Tetrachlorethylene.*—Note: Specific adequate directions for the administration of a saline cathartic should be given.

3. *Aspidium* (Male Fern).—Note: Specific adequate directions for administration of a saline cathartic should be given. "Warning: Avoid taking castor oil or other preparations or foods containing oil or fat while this drug is being administered."

4. *Santonin.*—"Very important: Shake vigorously before using. Failure to do so may result in serious injury. Caution: The use of more than the prescribed dose is dangerous. Do not take castor oil or other preparations or foods containing oil or fat while this drug is being administered. The prescribed dose should not be repeated within 7 days."

5. *Chenopodium Oil.*—Note: Specific adequate directions for administration of a cathartic, preferably castor oil, should be given.

6. *Thymol.*—Note: Specific adequate directions for administration of a saline cathartic should be given. "Warning: Avoid taking alcohol or any preparation containing alcohol before, after or during administration of this drug."

Acetanilid—"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances, anemia, collapse or a dependence on the drug. Do not take more than the dose recommended. Not to be given to children."

Acetophenetidin.—"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances. Do not take more than the dosage recommended."

Antipyrine.—"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances. Do not take more than the dosage recommended."

Bromides.—"Warning: Frequent or continued use may lead to mental derangement, skin eruptions or other serious effects. Do not take more than the dosage recommended. Not to be taken by those suffering from kidney disease."

Chlorates.—Mouth washes and gargles containing chlorates. "Caution: Avoid swallowing."

Arsenic.—Preparations containing arsenic except those employed as chemotherapeutic agents for specific diseases such as syphilis, amebic dysentery, etc. "Caution: Continued or prolonged use may result in serious injury."

Quinine, cinchonine and cinchonidine.—"Cau-

tion: Discontinue use if deafness, skin rash, visual disturbances (eye trouble) or other serious symptoms appear."

Silver Salts.—Preparations containing silver salts. "Caution: Prolonged or frequent use of this preparation may result in permanent discoloration of the skin and mucous membranes."

Cough Medicines.—Preparations sold under representations relating to coughs due to colds. "Important: Persistent coughs may indicate the presence of a serious condition. Do not use this preparation when the cough has persisted for 10 days without securing competent advice."

Mercury—Preparations containing mercury intended for administration by mouth or as douches "Warning: The prolonged or frequent use of this preparation or the use of amounts in excess of the prescribed directions may cause serious mercury poisoning."

Rubifacients, or irritants such as ammonia, arnica, cantharides, capsicum, chloroform, ether, methyl salicylate, pepper, mustard or turpentine oil intended for surface application.—"Caution: This

preparation may irritate the skin, particularly if applied with rubbing. Avoid getting it into the eyes or on mucous membranes."

Chrysarobin or Goa Powder.—"Caution: The use of this product over large skin areas may cause kidney irritation. Warning: Keep away from the eyes."

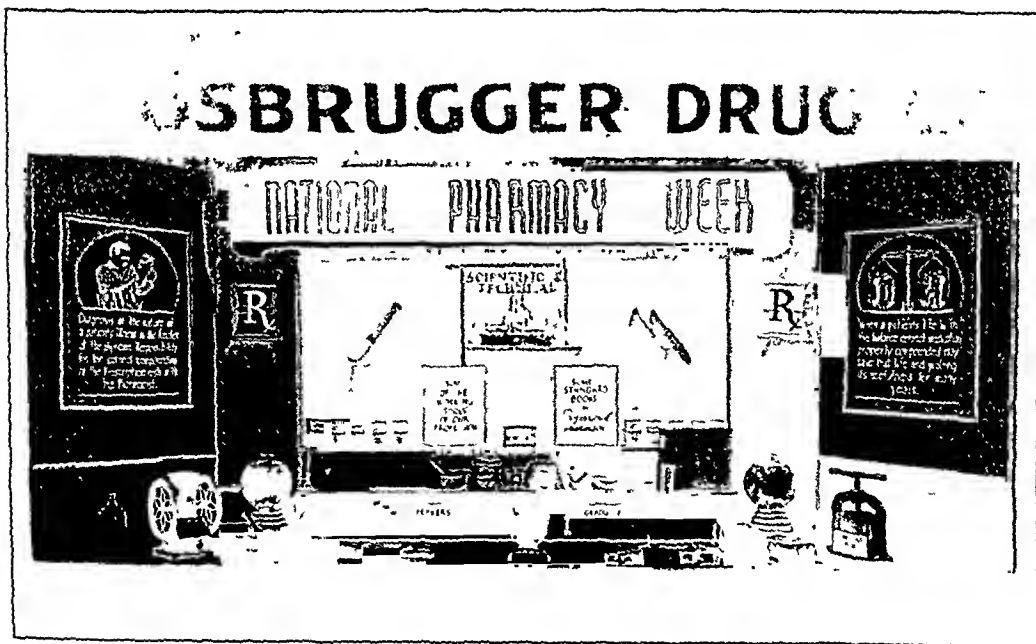
Digitalis, squill, strophanthus or other pharmacologically related drugs in therapeutically effective proportions.—Note: Patent doses of these drugs have an accumulative action and may lead to disastrous effects upon the heart and circulation. They should be used only under the direct supervision of a qualified physician. "Caution should be exercised in using this preparation, particularly if the patient has had digitalis, squill, strophanthus, ouabain or similar drug within the preceding three weeks. The appearance of anorexia (loss of appetite), nausea, vomiting, headaches or heart irregularities (palpitation) is often an early sign of full digitalization or overdosage. When such symptoms appear do not continue the use of this preparation without consulting the physician."

Pharmacy Week Window Display Contest. Announcement of Awards for 1939

The National Pharmacy Week Window Display Contest Committee, consisting of J. T. Matousek, Harry Baskind, Harry Friaburg, A. P. Gakenheimer, Robert Krebs, Roy W. Swisher, S. J. Sternieki, F.

nounced the winning displays in the three contesting groups—retailers, colleges of pharmacy and pharmaceutical associations.

The Federal Wholesale Druggists Association



J. Cermak, W. E. Luthy, A. B. Ejbl, A. L. Flandermeyer and Charles Masek, all of Cleveland, Ohio and John E. O'Brien, Omaha, Nebr., Chairman of the National Pharmacy Week Committee, has an-

Robert J. Ruth Memorial Trophy—a silver loving cup—will be presented to Moosbrugger Drug Company, Dayton, Ohio, and A. Ph. A. Pharmacy Week awards to the School of Pharmacy, Temple U

versity and to the Pennsylvania Pharmaceutical Association, at such time in the near future as suitable arrangements can be made.

In the retailer's group, First Place was awarded to Moosbrugger Drug Company, Dayton, Ohio. This window display was judged to be the most informative and most direct in the message it carried to laymen as well as to members of the health professions. It emphasized the knowledge and the care required in the filling of prescriptions upon which life may depend. It showed some of the apparatus and materials necessary in present day compounding and some of the apparatus used in olden days.

The following are judged as worthy of special mention in this group and will receive Honorable Mention Certificates:

L. L. Eisentraut Drug Company, Des Moines, Iowa
Weber & Judd Drug Co., Rochester, Minn.
Foote Pharmacy, Archbald, Penn.
Lloyd Hiller, Chicago, Ill.
A. D. Barnes, Buffalo, N. Y.
Sumner Drug Store, Lincoln, Nebr.
Frank Nau, Portland, Ore.
Hays Drug Store, Portland, Maine
Don Whitehead Drugs, Boise, Idaho

In the second group, colleges of pharmacy, First Place was awarded to the School of Pharmacy, Temple University, with Honorable Mention to the College of Pharmacy, State University, of Iowa and the Philadelphia College of Pharmacy and Science. The increase in the number of colleges participating was very encouraging.

In the third group pharmaceutical associations, the Pennsylvania Pharmaceutical Association was awarded First Place. It is hoped that a larger number of associations will take part in future observances by displays either in their headquarters or in other prominent locations as well as by addresses, and by radio and other broadcasts.

The Committee was encouraged by the number of entries in the contest and wishes to urge those state associations that did not participate to do so next year. Excellent descriptions accompanied most of the photographs and advertising and proprietary signs and labels were absent from a large proportion of the photographs submitted.

The entries were judged from many angles with special attention given to originality, simplicity, accuracy, neatness and appeal to the public. Based on its experience, the Committee approves the following recommendations submitted last year:

1. Every display should preferably carry out a *single* theme, and should be designed to inform the public about some phase of pharmaceutical service.

2. Every display should carry a prominent banner or sign with a clear, brief, forceful *title*—for example, "THE PROGRESS OF PHARMACY," "THE PROTECTION OF HEALTH," "PHARMACEUTICAL DISCOVERIES," etc. The absence of such a statement, telling what the display represented is a weakness in many displays.

3. Crowded displays are not effective and frequently the message is lost by attempts to fill up space.

4. Care should be taken to exclude all proprietary labels and signs from displays.

5. Displays might profitably be used several times during the year.

The Committee feels that the recent observance of Pharmacy Week was the most general and successful in the history of this movement. The demand for Pharmacy Week articles was good this year and they were apparently used more extensively in addresses and in publicity, especially by the radio.

The Pharmacy Week messages by President Roosevelt and by President DuMez of the A. Ph. A. were given wide publicity. A number of Governors and other state and local officials issued similar messages.

Two radio addresses were broadcast over a nationwide hookup and many over state and local stations in some localities on every day of the week. Pharmacy Week addresses before religious, civic, educational and other groups were more numerous than ever, as were the editorials and other articles dealing with the Observance.

Medical Service Plans and the Pharmacist

*By Robert P. Fischelis**

Improvement in the methods of providing medical care to the people of the United States continues to be a subject of animated discussion among physicians, social workers, governmental administrators and the public. In spite of the annual reports and recommendations of the Committee on Social and Economic Relations of the AMERICAN PHARMACEUTICAL ASSOCIATION, which have been approved by the House of Delegates, many pharmacists and pharmaceutical associations in various localities are apparently not acquainted with the efforts that have been made by the A. Ph. A. to keep in closest touch with developments in this field. It seems advisable, therefore, to briefly review the recommendations which have been made and to indicate the present stand of the ASSOCIATION on this very important topic.

In the first place, it should be recalled that we have recognized definitely that the physician is the central figure in any system of medical care, whether it be private practice,

* Chairman, Committee on Social and Economic Relations.

group practice, voluntary health insurance, compulsory health insurance or State medicine in any form. This is a simple fact which makes it obvious that it is not incumbent upon pharmacists to *initiate* any plan or system of providing medical care, even though they may be interested as citizens and as professional associates of physicians in supporting any system of medical care which guarantees to the recipient a high grade of professional service, and, to the professions involved, a satisfactory remuneration for the services rendered.

Health Insurance

In the second place, it is important to remember that health insurance, whether voluntary or compulsory, is a method of paying for medical services and is not a system of medical care. If this simple fact is remembered, it becomes apparent that pharmacists who believe in the private practice of Medicine as the best method of assuring the highest type of medical service to the people of the United States need not oppose the method of paying for such services by the application of the insurance principle. If this principle is properly applied it offers the average wage earner the only method of budgeting for medical care which has thus far been devised. The arguments over compulsory health insurance and voluntary health insurance plans frequently lose sight of the basic fact that paying for health services through insurance funds does not carry with it high quality or low quality service. It is quite probable that under some compulsory health insurance systems the quality of medical service has not been all that it should be. The same may be true of voluntary health insurance systems. This does not condemn the insurance method of paying for medical services. It merely condemns the administration of the particular service under discussion. There is nothing wrong with the wage earner paying a definite sum of money into a common pool for the purpose of paying for necessary medical care when he needs it, just as there is nothing wrong with the same wage earner purchasing fire insurance for his home or life insurance for his dependents. However, pharmacists

must be alert to the abuses of various compulsory and voluntary health insurance systems in order that they may act intelligently on proposals which involve supplying drugs.

Various county medical societies and independent groups of laymen and physicians are experimenting with a variety of voluntary health insurance schemes. This is not the time for any national, state or local pharmaceutical association to take a definite stand in favor or against any one of these schemes, since they are all in the experimental stage. However, it is incumbent upon the representatives of Pharmacy to keep fully informed with reference to all systems of medical care which are proposed and to watch particularly the proposals that are made for supplying drugs.

Governmental Control

In the third place, it must be remembered that whenever governments—federal, state or local—are called upon to pay for the medical care of the indigent, the medically indigent or low wage groups who may or may not be able to pay for their medical care in whole or in part, it is necessary to set up bureaus within those government units to supervise the distribution of such medical care and payment for it. Of necessity there is red tape and bureaucratic activity involved in administering a system of medical care which employs professional personnel, such as physicians, dentists, pharmacists, nurses and others, on a fee for service basis. Likewise, there is red tape and bureaucratic activity involved in a system which employs professional personnel to administer medical services provided for by law on a salary basis. Furthermore, all of the inefficiencies and undesirable consequences of governmental control of medical services which are so often stressed, apply with equal force to any such system of control. It is, therefore, well for us to not place too much stress on the argument that broadening the distribution of medical care, so as to include all who need it, necessarily means that medical services will not be adequate. In fact, it is a reflection on physicians, dentists, pharmacists and others to hold out

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that they will be less conscientious and give less efficient service when paid from an insurance fund than when they receive payment for their services directly from the patient.

From the foregoing statements and from a close reading and scanning of reports from various responsible agencies, governmental and private, it becomes apparent to the thinking person that the people of the United States will be benefited to the greatest extent by a broad general health program. Such a program would maintain the private practice of Medicine and Pharmacy, Dentistry and Nursing for those who are able to pay for it. It would provide voluntary health insurance plans for that section of our population which is unable to purchase medical care to the extent required when it is most needed, and it would provide compulsory health insurance for the indigent and others for whom the State would normally have to provide anyway.

Platform of the A. M. A.

In planning Pharmacy's position with respect to suggested methods of distributing medical care to better advantage, it is important to keep in mind the position of organized Medicine. The American Medical Association has recently announced a platform on the subject which reads as follows:

1. The establishment of an agency of the federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need, for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical service to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of Medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

Those who have followed the development of the American Medical Association's policy will recognize in this platform a merging of views of different groups within the medical profession and a recognition of the fact that the organization of medical services in the United States requires modification in order to make these services available at an equitable cost.

Position of the A. P. H. A.

If a federal agency for the coördination and administration of all medical and health functions is to be organized, it should be made clear that Pharmacy, Dentistry, Nursing and other associated services must be adequately recognized and properly provided for in such an agency. In this connection it is well to reiterate the position taken by the AMERICAN PHARMACEUTICAL ASSOCIATION at the 1938 convention as expressed in resolution form:

Resolved:

1. That the AMERICAN PHARMACEUTICAL ASSOCIATION expresses its profound interest in all plans proposed for extending medical care,

2. That the ASSOCIATION pledges its cooperation in devising suitable plans for the utilization of existing agencies now providing medical services and

3. That the ASSOCIATION strongly urges the retention of free choice of physician, dentist, pharmacist and nurse, by the pa-

ient, as an essential feature in whatever system may be adopted.

The ASSOCIATION has, through its Committee on Social and Economic Relations, kept itself in close touch with national and state developments in the distribution of medical services. It has been represented at all important conferences of a national character where this topic has been under discussion. It has urged state and local associations and groups of pharmacists to keep in active and continuous touch with medical societies in their localities, with state and local governmental developments in the field of medical care, and with social service groups and others who are developing medical care plans. It has urged for several years that Pharmacy should be represented on state and local boards of health. By so doing the viewpoint of Pharmacy will be stressed and made known to all who are active in this field. This is the best service that can be rendered at this time to the public, to the medical profession and to our own profession. The A. PH. A. has made known its desire to be heard before the Senate Committee which is considering the Wagner Health Bill and the Chairman of the Committee on Social and Economic Relations has been instructed by the Council to prepare a statement for Submission to the Senate Committee.

Prescription Pricing

In some respects Pharmacy is in a preferred position with respect to medical care plans. The expenditure for drugs required in the treatment of the average illness is not extremely high. Therefore, the tendency is to continue the present system of supplying drugs through the drug store. However, there is one very important factor in the situation to which pharmacists must give attention, namely, the pricing of prescriptions. Professional service is worthy of a professional fee. The compounding of a prescription requires skill, experience and scientific knowledge. All these must be paid for and are usually paid for cheerfully by the patient. However, it is common knowledge on the part of physician, as well as patient, that ready-made drugs in tablet or other dosage

forms supplied by manufacturing houses do not require the compounding skill of the pharmacist, although they do require the same degree of care in selection, dispensing, labeling and filing of the prescription. Obviously, a compounding fee which is perfectly in order in connection with a prescription that requires compounding, cannot be justified in dispensing a prescription which requires no compounding. The setting of a price on a prescription to a patient should be a matter of careful and consistent accounting. A uniform prescription pricing schedule, taking the various service factors into consideration, is essential to the preservation of the private practice of Pharmacy and should have the attention of all organizations interested in the preservation of that system of practice.

National Formulary Revision

Dyes for Staining Solutions

The N. F. VII will contain a revised, enlarged chapter on Materials and Preparations for Diagnostic Use which should be of real service to pharmacists who either engage in clinical laboratory work or furnish materials to such laboratories. A number of dyes are contained in staining solutions and it is necessary that these dyes be standardized as to dye content, solubilities, moisture content, color reactions, etc.

The January issue of the Bulletin of the Committee on National Formulary, Volume VIII, No. 4, includes the proposed monographs for about thirty dyes and the experimental data about them as determined by the A. PH. A. Laboratory. Copies of this number may be obtained from the A. PH. A. at fifty cents each.

Sale and Labeling of Rubbing Alcohol Compound

Treasury decision, No. 4963, was approved January 18, 1940, which requires that rubbing alcohol compound must be sold only by wholesale or retail druggists, that the sale must be made by a registered pharmacist, and that the words "sold by," followed by the name of the pharmacist and the name and address of the particular store where the sale was made, must be written across the front label, in contrasting colors, at the time of sale. It was also required that a caution label be placed on the back of the bottle.

Local and Student Branches

BALTIMORE.—The meeting was held on Thursday evening, December 14th, at the School of Pharmacy building, 32 S. Greene St., at 8:30 P.M.

The guest speaker was Mr. L. A. Helfrich, Superintendent of Production for the U. S. Industrial Chemicals Co., Curtis Bay, Md. We are all cognizant of the place alcohol, ether, acetone, etc., have long held as indispensable materials in pharmaceutical processes. We are also informed as to the virtues of alcohol as a component of spirits for medicinal purposes. Few of us, however, are aware of the important position now held by alcohol and numerous derived chemicals and solvents as necessary raw materials in various industries and manufacturing fields unrelated to Pharmacy. In his talk on Alcohol and Related Chemical Products Mr. Helfrich gave an outline of some of the varied present-day use of these products which proved very interesting to pharmacists.

Refreshments were served at the conclusion of the regular meeting.

ROBERT S. FUQUA, *Secretary*

CHICAGO.—The 261st meeting was held Tuesday evening, December 12th, President Templeton presiding, with an attendance of almost 70 members, friends and guests.

President Templeton appointed a Nominating Committee consisting of E. H. Wirth, H. M. Emig and J. H. Lindahl, to prepare a list of nominees for election at the coming meeting.

Mr. A. J. Travis of E. R. Squibb & Sons was to have spoken on "Vitamins and Newer Therapeutic Agents," but was unable to appear, so Mr. J. O'Donnell, also of Squibb & Sons, spoke on "Antipneumococcic Sera." He gave a brief but informative talk on the subject, treating of the previous and recent work on rabbit sera, the availability of antisera against all types of the pneumococcus, the distribution of the sera and the treatment of pneumonia with them and with sulfapyridine.

A rising vote of thanks was accorded Mr. O'Donnell for his able substitution and his informative talk.

EDWARD E. VICKER, *Secretary*

FERRIS INSTITUTE.—The first meeting of the year which was held Wednesday evening, October 11th, was opened by the Vice-President, Bill Sutton. The minutes of the last meeting were read and approved. A short business session was held at which time it was decided that the election of officers would be postponed. Plans were formulated to secure new members for the Branch. Dean Benson gave a short talk on getting students outside the Branch to attend our meetings.

Following the business meeting, we adjourned to the Physics Laboratory where Mr. Grover Baker

spoke on various phases of Pharmacy in relation to Physics. He demonstrated some scientific apparatus including the X-ray, neon tubes, spectroscopy and equipment for the hydrolysis of water.

The monthly meeting was held Wednesday evening, November 15th, at 7:30 P.M. Vice-President William Sutton opened the meeting. The minutes were read and approved. At the short business session, it was decided to complete the drive for new members.

Mr. Sutton introduced the speaker of the evening Mr. Joseph Vaughan, who spoke on the topic, "The Control of Athlete's Foot." Mr. Vaughan gave a brief history of the disease, listed the various common names for athlete's foot and pointed out the different types of the infection. He discussed briefly the various bacteria causing athlete's foot. The speaker lent a considerable portion of his time to illustrate the method he used in determining the best medicinal for its control. It was found by experimentation that a solution of sodium hypochlorite is best. Following the talk, there was a general discussion of the subject.

The regular meeting was held Wednesday, December 13th, at Ferris Institute with William Sutton presiding.

The speaker of the evening was Mr. F. E. Green, director of Public Health in Mecosta County. Mr. Green chose for his topic, "Patent Medicines." Remedies used in stomach disorders and the various types of laxatives were the principle subjects of discussion. Mr. Green reviewed the results of a survey he made concerning the popularity of various patent medicines. He pointed out which ones the women were likely to purchase and which ones were purchased most frequently by the men.

An election of officers was held in which the following was selected: *President*, Henning Engmark; *Vice-President*, William Sutton; *Secretary*, Morris Foekler; *Treasurer*, Michael McNab. The chairmen of the various committees appointed by the president are as follows: *Membership*, Joan Olsen; *Program*, Michael McNab; *Publicity*, Robert Trommer; *Student Activity*, William Sutton.

LESLIE KIEFT, *Secretary*

NEW YORK.—In acceptance of an invitation by the Kings County Pharmaceutical Association, the regular meeting of the New York Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held at the Brooklyn College of Pharmacy, on Monday evening, December 11, 1939. President Canis called the gathering of about one hundred members and

guests to order at 8:35 P.M. and expressed the thanks of the Branch for the privilege of holding the meeting at the Brooklyn College of Pharmacy.

The report of the treasurer, Mr. Currans, was accepted and ordered attached to the minutes.

Mr. Frederick Schaefer reported that the Membership Committee had been coöperating with Secretary Kelly in attempts to bring back into active membership those members who have become delinquent in the payment of dues. He reported that the only effective method was by personal contact. The applications for membership of Mr. Charles J. Heimerzheim and Mr. Lawrence H. Dalman were presented.

The report of the Committee on Education and Legislation was read by Mr. Robert Lehman, Chairman, and ordered attached to the minutes.

A communication congratulating the Branch on the type of programs offered and upon the attendance at the meetings, from Dr. Ernest Little, Chairman of the A. Ph. A. Committee on Local and Student Branches, was read.

A nominating committee consisting of Mr. Robert Lehman, Chairman, Dr. Curt P. Wimmer and Dr. James H. Kidder was appointed and directed to report at the regular January meeting.

Mr. Gustave Bardfeld presided during the Scientific Section.

George W. Raiziss, Ph.D., Professor of Chemotherapy, Graduate School of Medicine, University of Pennsylvania, spoke on "Progress in Chemotherapy and Clinical Application of Antisyphilitic Remedies."

Dr. Raiziss divided the field of Chemotherapy in two parts. *First*, the chemotherapy of protozoan infections. For many years work has been progressing in the preparation of antisyphilitics. *Second*, the chemotherapy of bacterial infections. In this field there had been practically nothing of value until the introduction of the use of Prontosil. The use of Sulfanilamide gave great impetus to the chemotherapy of bacterial infections. This drug is capable of being modified in many ways and numerous derivatives have been prepared. Sulfopyridine represents the first drug delivered by Chemotherapy for the cure of pneumonia.

He outlined Paul Ehrlich's experimental work starting with Atoxyl and going on through most of the arsenicals. He pointed out that almost every efficient trypanocidal preparation contains the —As=As— group. He emphasized the care and months or even years of experimental work required of the Chemotherapist before a preparation may be offered to physicians for clinical use.

Herman Beerman, M.D., Assistant Professor of Dermatology and Syphilology, Graduate School of Medicine, University of Pennsylvania, discussed "Recent Clinical Trends in Antisyphilitic Therapy."

Dr. Beerman began his discussion with the statement that there had been no significant progress in chemotherapy prior to 1910 when Ehrlich gave us arsphenamine. Since then there has been a tremendous

amount of progress. He stated that the clinical study of a drug is invalid unless it is carried out over a period of years, in some instances as many as twenty years of observations being required. He discussed numerous points to be watched during the clinical testing and pointed out the relative clinical values of various arsenic and bismuth preparations.

Dr. Beerman then described various methods of administering the antisyphilitic drugs. He described the treatment of syphilis to-day and enumerated five points: (1) Early diagnosis, (2) use of drugs of proved worth, (3) use of continuous methods of treatment without rest periods, (4) determination of a cure only by long observation, (5) avoidance of toxic manifestations in the patient.

Dr. Crawley, Medical Consultant, New York City Department of Health, pointed out that the pharmacist could be of incalculable value in the war against syphilis by referring questioners to physicians or to the Department of Health. The Department will give, without charge, a dark field examination of any lesion or any kind of a discharge. It also offers a free Wassermann test of the blood or of the spinal fluid. It will consult with physicians in charge of cases and offers free drugs to patients unable to pay and special rates to those in reduced circumstances and unable to pay the full price.

Pertinent exhibits were offered by Merck and Co., E. R. Squibb & Sons, Abbott Laboratories.

At the conclusion of the discussion, a rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

PHILADELPHIA.—The December meeting was called to order by Chairman Osol at 8:15 P.M. on Tuesday, December 12th at the School of Pharmacy, Temple University. Minutes of the November meeting were read and approved.

Mr. Donald Johnson, Chairman of the Temple Student Branch, was introduced by Dr. Osol. He reviewed the activities of the student group during the past year, and also outlined some of their hopes and aims.

Chairman Osol presented the speaker, Dr. Arthur James, Professor of Chemistry at the School of Pharmacy, Temple University. Dr. James' address dealt with the "Recent Developments in Enzyme Chemistry." He reviewed their history from discovery to present-day uses. Professor James explained their chemical structure, the theory of their action and their importance in current living. Dr. James' enthusiasm and knowledge of his subject made it of unusual interest.

The meeting was opened for discussion, and the many questions asked developed the subject to a still greater extent.

A rising vote of thanks was accorded the speaker

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The January meeting was called to order by Chairman Osol at 8:20 P.M. on Tuesday, January 9th, at the Philadelphia College of Pharmacy and Science.

Minutes of the December meeting were read and approved. The Treasurer's report for 1939 was submitted and accepted. A resolution was adopted, upon motion by Professor Nichols, authorizing the Treasurer to transfer the checking account from the Integrity Trust Company to the Northern Trust Company.

Mr. Simpson nominated, and the body unanimously elected, Mr. Richard Bitner and Mr. Robert S. Moser to associate membership.

Professor Nichols announced that Dean Griffith would discuss "Dyes in Medicine," at the March meeting, and that Dr. Leonard Rountree would speak at the April meeting on the "Chemical and Clinical Studies on Adrenal Glands."

Dr. Osol introduced Professor Linwood F. Tice of the Department of Pharmacy of Philadelphia College of Pharmacy and Science, who spoke on the "Newer Emulsifying and Stabilizing Agents."

Professor Tice discussed the chemistry and practical application of the diglycol stearate type compounds, ethanolamines, alginates, polyvinyl alcohol, etc. His many demonstrations, including the surface depressant action of wetting agents and protective action of methyl cellulose and gelatin, added great interest to the lecture.

The audience took an active part in the discussion following the lecture, and a rising vote of thanks was accorded the speaker. R. H. BLYTHE, *Secretary*

PURDUE UNIVERSITY STUDENT BRANCH.—A reception for the entire student body and faculty was held in the Pharmacy building November 10th, to aid in our membership drive; about eighty students attended. The first part of the evening was spent in playing games, and later refreshments were served.

The social meeting of November was postponed until the 28th in order that we might obtain three reels of moving pictures on the "Cascara Sagrada Land" and obtain a representative from the Ahlert Laboratories to give a brief talk on them. They were kind enough to send Dr. Frank B. Kirby, who is their director of education, to explain the pictures. The films showed many interesting scenes taken in the "Cascara Sagrada Land" which made the films very entertaining as well as educational. The correct methods for peeling or stripping the bark from the trees, drying, curing, crushing and the packing of the crude drug for shipping were shown and explained by Dr. Kirby. He also gave a short talk on how other drugs of the U. S. P. could be taken and a story written about their history, properties, uses, advantages and disadvantages.

This meeting was held in the large lecture room of the Pharmacy building and about sixty students attended.

The meeting was called to order on December 10th, by George Osborn.

Richard Gerding asked to be allowed to resign his office as Vice-President because he will graduate in February and will not be in school the second semester. His resignation was voted on and accepted. Wade Shanower and Henry Biken were nominated, and Henry Biken was elected.

Various methods for increasing our membership were discussed. It was suggested that we impress upon the students the need of joining an organization here in school that will continue to function after we are out of school. Also the advantages of joining the A. Ph. A. while in school, were explained.

J. HOUSEWORTH, *Secretary*

WESTERN NEW YORK.—The regular meeting held on the University Campus on January 4th was preceded by a dinner in honor of the guest speaker. Thirty-five members and friends attended the dinner, while ninety-three were present for the meeting at eight o'clock. Vice-President Mearl Pritchard called the meeting to order. The minutes of the December meeting and the Treasurer's report were read, approved and accepted. As a new member of the A. Ph. A., Mr. Pritchard introduced Mr. A. Berman of the United States Pure Food and Drug Administration.

After giving a brief but very effective talk on the advantages to all concerned of better cooperation between the medical and pharmaceutical professions, Mr. Pritchard announced that the Local Branch had been invited to meet with the Buffalo Academy of Medicine on January 10th. He urged each pharmacist present to attend this meeting and to bring a guest with him.

Dean Lemon introduced the speaker of the evening, Dr. Robert C. Page, an alumnus of the University, now Medical Research Consultant of Burroughs, Wellcome and Company. Dr. Page gave an illustrated lecture on "Sex Hormone Therapy." The talk was comprehensive, complete, thought-provoking and delivered in a scholarly manner.

After the regular ten minute intermission period the written questions presented by members of the audience were discussed and answered by Dr. Page, Dr. Harry LaForge and Dr. Frank Meyers.

MARGARET C. SWISHER, *Secretary*

IN THE NEWS

Among the visitors at the American Institute of Pharmacy during December were: Ted Johnson, Chicago, Ill.; Edwin Johnson, Chicago, Ill.; Theodore Friedlands, Chicago, Ill.; Harold Strauss, Brooklyn, N. Y.; J. Leon Lascoff, New York City; Mary Isabel Gibson, Washington, D. C.; Herman Kramer, Allston, Mass.; Elizabeth Greenberg, Chicago, Ill.; Leon G. Marin, Alexandria, Va.; Rena Gomez, New Bedford, Mass.; Rose Silverman, Chicago, Ill. John Wallace, Washington, D. C.; A. Garrard MacLeod, Kalamazoo, Mich.; M. L. Gomez, New Bedford, Mass.; Thelma J. Coburn, Birmingham, Ala.

Mr. Walter D. Adams, Past-President of the AMERICAN PHARMACEUTICAL ASSOCIATION, attended the inauguration of Dr. Homer Price Rainey as President of the University of Texas on December 10th, in Austin, Texas, as the representative of the ASSOCIATION.

Dr. Rainey, prior to becoming President of the University, was Director of the American Youth Commission, Washington, D. C.

The induction into office was witnessed by persons of national reputation in the field of education and scholarship. The formal installation ceremonies were preceded by a full-robed academic procession a quarter of a mile long. Col. J. R. Parten administered the oath of office at the conclusion of a program of speeches and music and the entire inaugural party were guests thereafter at a luncheon. Present in the audience were Dr. Rainey's parents, Mr. and Mrs. E. L. Rainey of El Paso, Texas, who for the third time witnessed their son become a university president. In accepting the presidency, Dr. Rainey accented the service which the state school should be to its state, and stated that no university has greater possibilities than Texas.

The 1940 convention of the N. A. R. D. will be held in New York City the week of September 23rd to 27th, with headquarters at the Pennsylvania Hotel.

The 18th annual observance of National First Aid Week, sponsored each year by the N. A. R. D., will be held during the week of May 19-25, 1940.

Dr. John J. Grasser, Dean Emeritus of Loyola University, College of Pharmacy, donated his personal library of five hundred volumes to the college. Most of the books are technical treatises on Pharmacy, Chemistry and Medicine. Also included in his collection are a large number of pharmaceutical textbooks from many countries of the world. The students of Pharmacy are already appreciating the value of Dr. Grasser's splendid contribution.

In 1840 Henry Troemner arrived in Philadelphia at the age of 20, and together with a partner, J. P. Myers, founded the company which still bears his name. After the original founder passed on the business was carried on by his three sons; and now is being managed by three of their descendants. In addition to manufacturing prescription scales the Company makes scales and balances for chemists, assayers of gold and other precious metals, jewelers and bankers. The money coined by the U. S. Government has been weighed in Troemner scales since their inception. The manufacturing of special gold bullion balances for the U. S. mints is very interesting. Scales for weighing diamonds also are very intricately made.

The employment record of the firm is unique. Because the work is entirely precision hand work, and requires a high degree of accuracy and skill, practically every one of their employees has grown up in the business, and the manager, J. L. Troemner, states that he knows of no employee who has ever been discharged for any reason whatsoever during the entire 100 years of the company's life. Coincident with their 100th anniversary one of their head adjusters is celebrating his 83rd birthday and his 65th year as an employee of the firm.

In 1930, professional persons made up out of each 16 of the workers who were gainfully employed, showed 2,945,757 out of 48,829,920.

J. L. Hopkins & Co., New York City, began business fifty years ago, as importers of crude drugs and distributors of botanical drugs of domestic origin. Toward the end of the nineteenth century the company inaugurated the practice of chemically standardizing its botanicals, Mr. Hopkins being the pioneer in this service among crude drug suppliers. The records of those early reports on standards are preserved in the archives of the company.

Dr. Charles R. Reynolds who retired as Surgeon-General of the U. S. Army last June, and who was succeeded as Surgeon-General by Dr. James Carré Magee, has been appointed as Chief of the Division of Tuberculosis Control of the State Department of Health of Pennsylvania. Dr. Reynolds cooperated effectively in securing the legislation which provides commissions for pharmacists in the Medical Administrative Corps of the Medical Department of the Army. The thanks of the ASSOCIATION were extended to Dr. Reynolds in a resolution adopted at the Dallas meeting in 1936.

The annual report of the Bureau of Animal Industry, U. S. Department of Agriculture for 1939,

states that during the year 471 students graduated from accredited veterinary colleges, an increase of 56 as compared with the preceding year. The total enrollment was 2480, an increase of 23. There are 10 accredited veterinary colleges in the United States, the number being unchanged from last year.

The AMERICAN PHARMACEUTICAL ASSOCIATION donated copies of the N. F. VI and R. B. II for inclusion in the Crypt of Civilization, Oglethorpe University, near Atlanta, Ga. These books will rest in the crypt to be opened in the year 8113, along with other books, newspapers, film, records, etc., in order to preserve our present civilization for those who may be living at that time. To Dr. Thornwell Jacobs, President of the University, goes the honor of having conceived this idea.

In response to an invitation from Mr. B. M. Cherrington, Chief of the Division of Cultural Relations of the United States Department of State, President DuMez has appointed Dr. Ernest Little, Dean of Rutgers University College of Pharmacy, Newark, N. J., as a member of the Continuation Committee of the Conference on Inter-Allied Relations in the Field of Education.

Chairman John E. O'Brien of the Committee on National Pharmacy Week will address the annual meeting of the Iowa Pharmaceutical Association at Des Moines, February 13th to 15th.

and other equipment used in medieval pharmacy represented objects from world-wide sources.

Kindly in manner, with a tolerance and patience acquired through long experience with life, he attracted a host of friends and these gathered to their last respects at the funeral service on December 7th. Interment was in Indianapolis.

Mr. Costelo had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION for many years.

Dr. Alexander Tschirch

Prof. Dr. Alexander Tschirch, of the University of Bern, internationally known pharmacognosist, died December 2nd, aged 83 years. Dr. Tschirch was elected an honorary member of the AMERICAN PHARMACEUTICAL ASSOCIATION in 1910. His seventieth birthday was widely celebrated and his student presented a memorial art-glass window to the University, which symbolizes a medieval teacher of science surrounded by his pupils, who are being instructed in the mysteries of the poppy plant. The design was by Albin Schweizer and the art-glass work by Louis Halter, noted Swiss artist. (See November JOURNAL, 1926, page 957; also April JOURNAL, 1920, page 359.) The "Festschrift" was published in 1921, a book of more than 400 pages. Other interesting pages may be found in the JOURNAL A. P. N. A., October and November 1926; January and February 1927; November 1931 and October 1926.

Dr. Hermann Thoms wrote the introductory to the "Festschrift;" this gives the names of many who sent messages of appreciation for the services rendered by Dr. Tschirch.

Dr. Edward Kremers, writing of the earlier days of the University at Bern, says: "From the more modest 'Staats Apotheke' at Bern in 1873 with its equally modest occupant, to the well-boused and its equally well-equipped building which was dedicated in 1893 and the election of its director to the directorship of the Swiss University seems a long road to travel, yet the task was accomplished in a single generation; from all parts of the world students came to Bern."

The two masters of modern Pharmacognosy—Flueckiger and Tschirch—have left their mark and it remains for us to carry on and forward. The aim of Dr. Tschirch was to place Pharmacognosy upon a scientific basis and this resulted in the production of the "Handbuch." This work has stimulated research in many countries and it is a reasonable hope that his writing will continue to exert a beneficial influence for many years.

Dr. Tschirch was born at Guben, Prussia. In 1856, he studied at the Universities of Freiburg, Bern and Berlin; for a time he was actively engaged in Pharmacy and passed the examinations in Germany Pharmacy. He was a Hanbury medalist and an honorary member of many scientific and pharmaceutical associations. The "Handbuch" is an encyclopædia and he was one of the foremost contributors to pharmaceutical literature.

OBITUARY

David Costelo

With the passing of David Costelo on December 5, 1939, Pharmacy loses another man who held to the best traditions of the calling. His pharmacy retained the professional aspects reminiscent of former days but at the same time was thoroughly modern in facilities for serving the needs of medication to-day.

David Costelo was born in Indianapolis, Ind., November 9, 1856. He attended the Philadelphia College of Pharmacy and was graduated in 1879. He entered the employ of Caswell, Massey & Co. in 1880 and remained until 1908. Following the Caswell-Massey period, Mr. Costelo conducted his own pharmacy first at 6 W. 51st St. and later at the present location, 41 E. 60th St.

He was elected a trustee of the New York College of Pharmacy in 1911 and as Vice-President in 1933, serving actively until 1938 when because of advancing age he refused further nomination. In that year he was elected as Honorary Vice-President for life.

Aside from his professional work in Pharmacy Mr. Costelo was intensely interested in the antiquities of Pharmacy and his collection of drug jars, mortars

GENERAL NOTICES

Remittances. Annual membership dues, subscriptions, notices of changes of address, orders for subscriptions and back numbers and claims for missing numbers should be sent to Secretary E. F. Kelly, 2215 Constitution Avenue, Washington, D. C.

Claims will not be allowed for copies of journals lost in the mails unless such claims are received within sixty days of the date of issue, and no claims will be allowed for issues lost as a result of insufficient notice of change of address—ten days' advance notice is required.

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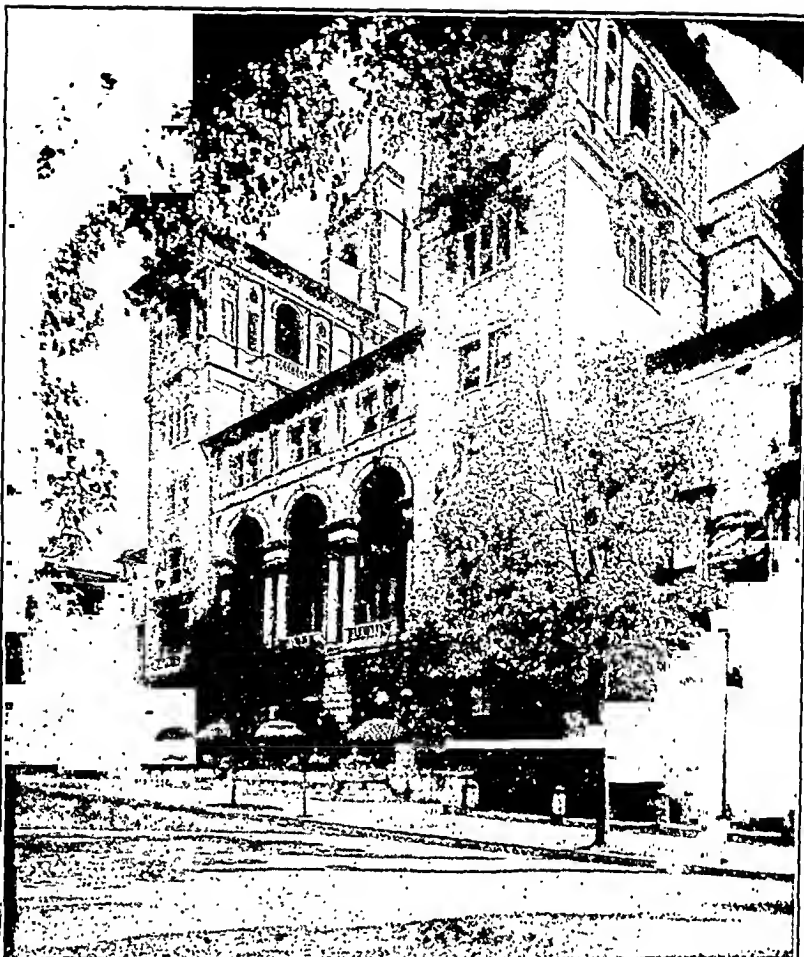
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Practical Pharmacy Edition

Journal of The American Pharmaceutical Association

E. F. Kelly, Editor, 2215 Constitution Ave., Washington, D. C.

The Richmond Meeting, May 5-12, 1940

VOLUME

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NUMBER 2

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President DuMez and Secretary Kelly met with Local Secretary Bird and the members of the Local Committee in Richmond on Thursday evening, February 9th, to complete the general arrangements for the 88th Annual Meeting. The General Program which has been followed in recent years will be continued. The National Association Boards of Pharmacy and the American Association Colleges of Pharmacy will hold their sessions on Monday and Tuesday. An important feature is the Joint Conference of the N. A. B. P. and the A. A. C. P. and the A. Ph. A. on Tuesday forenoon when several joint committees will submit reports which will be discussed. The National Conference of Pharmaceutical Research will hold its meeting on Tuesday afternoon.

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The entertainment program will soon be announced. Important features will be an opening entertainment on Sunday evening, the Joint Banquet on Wednesday evening, a Farewell Party on Friday evening and a trip on Saturday afternoon or Sunday to historic places of interest. A special entertainment program for the ladies is being worked out and arrangements for special trips at any time during the week.

The complete program will be printed in the April issue of this publication. In the meantime further information will be given in the March issue and in communications to be sent directly to members or to anyone who will communicate with Local Secretary L. C. Bird, 915 E. Cary St., Richmond, Va. The Local Committee will have the active support of the State and City Chambers of Commerce and arrangements are being made for special publicity, local and national.

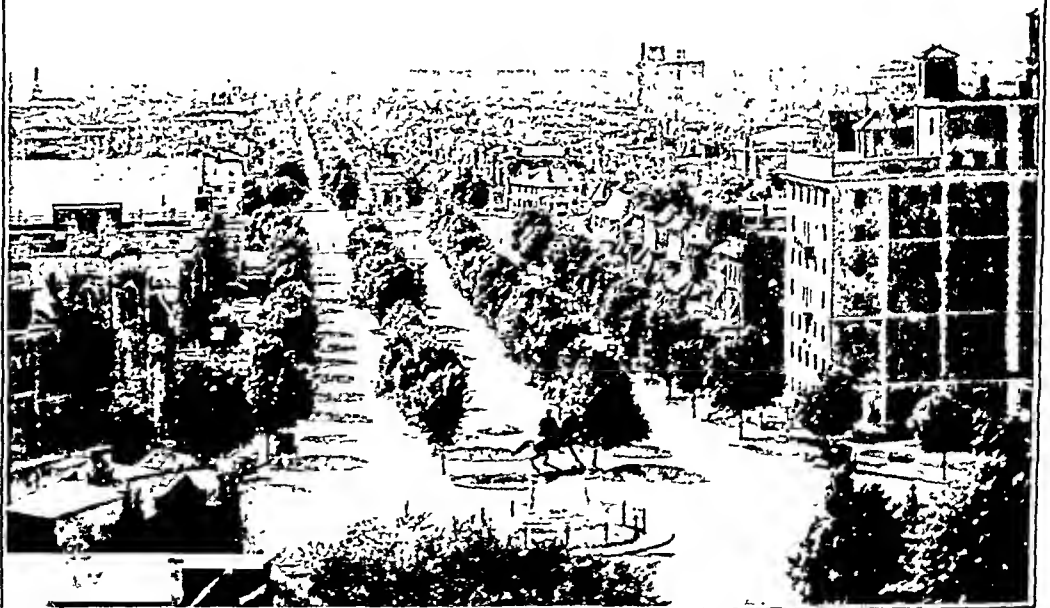
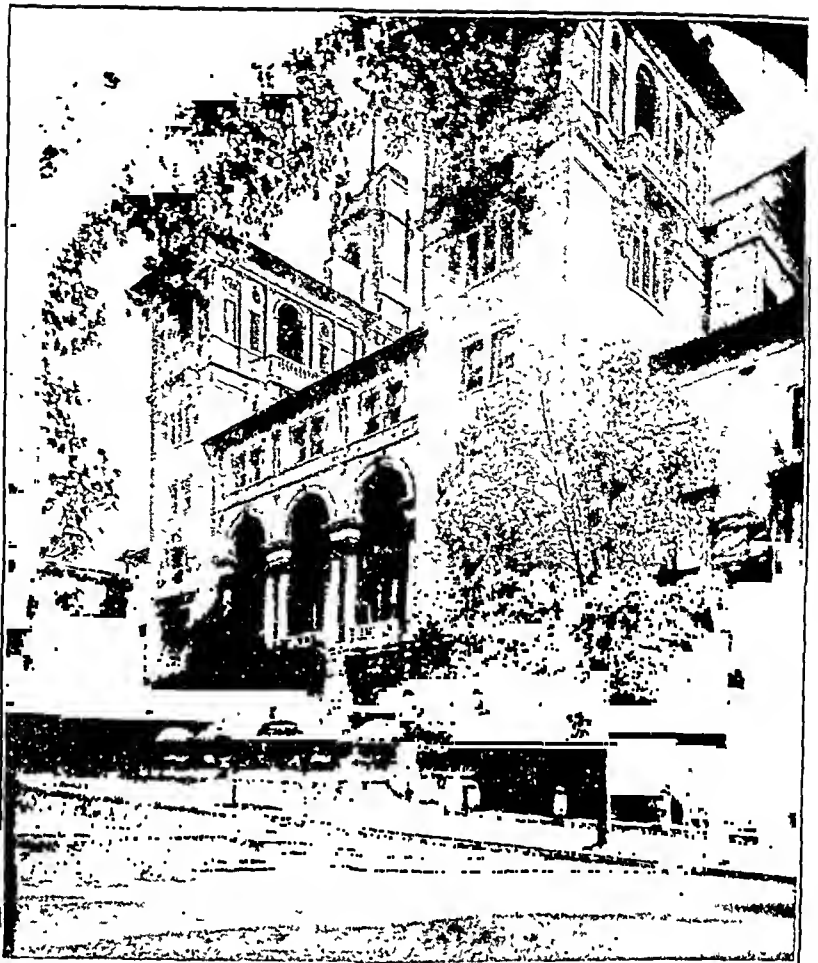
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Those who expect to contribute papers are urged to submit titles and abstracts to the secretaries of the Sections and Conferences promptly; they must reach the Secretary of the ASSOCIATION by March 18th to be included in the printed program. —E. F. K.

The U. S. P. Convention

In accordance with the requirement of the Constitution and By-Laws, the Board of Trustees have submitted to the medical and pharmaceutical press certain proposed amendments which will be acted upon during the Convention in Washington on May 14th and 15th in a statement which explains in full the purposes of the amendments and gives the reasons for their approval by the members of the Board. This statement will be found on pages 55 of this issue and should be carefully studied by those interested in the future of the Pharmacopœia and particularly by the delegates to the Convention whose duty it will be to act upon these and any other amendments that may come before the Convention.

During the Convention of 1930 and since that time, severe criticism has been leveled not so much at the Pharmacopœia because it is recognized by the critics as the peer of any similar work in the world, but rather at certain features of the machinery under which it is revised. The criticism may be taken as an indication of a deep interest in the Pharmacopœia and of a sincere desire to see that it will continue to occupy its present high position or an even higher one if possible. The Board of Trustees has given careful consideration to every criticism and suggestion which came to its attention and as the result has submitted those amendments which in its best judgment should be considered by the Convention. In order to make possible the consideration of other amendments to the Constitution in addition to those submitted, the Board suggests an amendment for this purpose. At least three of these amend-

ments may be considered as of basic importance. The delegation from each body entitled to representation in the Convention is limited to one vote whether composed of one, two or three delegates. Authority is given to issue a second Revision of the Pharmacopœia in any one decade, in addition to the authority now granted to issue interim revisions. Provision is made that five of the fifty members of the Committee of Revision may be selected from other than those members of the Convention. These amendments, if adopted, should have a profound influence for good on the future of the Pharmacopœia.

Those organizations entitled to representation should bear in mind that the credentials must reach the Secretary of the Convention on or before March 15, 1940. —E. F. K.

American Pharmacy—First Line Defense against Disease

It is correct to say that the American people do not as yet clearly understand the scope and character of the health services rendered by pharmacy nor how necessary such services are to their comfort and welfare. Judging from the limited use that is made of their services it appears that many of those directly connected with public health work do not fully appreciate the strategic position which the 100,000 pharmacists of this country hold in the public health field, and the great assistance that this army of specially trained men and women could give and desire to give if they were made a more integral part of the public health program.

It is encouraging to note the progress that has been made in recent years to correct these conditions although much remains to be done. The extensive studies which led to the Charters Report and to the report of the Committee on the Costs of Medical Care and which were directed by disinterested experts, left no doubt that pharmacy is a public health profession which renders important and necessary services and which has much greater possibilities if

they were developed. Pharmacy as a Career, issued by the Office of Education, U. S. Department of the Interior and other publications of this type have been very helpful in providing basic information. Pharmacy Week and special programs carried on by state and local associations have accomplished much more than is realized by the average pharmacist, toward informing the public and these improvements are gaining momentum each year. Every pharmacist should give these efforts his personal attention and support.

It is also encouraging to have public health officials, prominent laymen and various publications in increasing numbers recognize the important part which pharmacists play in public health. The following comments are taken from three recent addresses or articles.

"In the fight against major disease, the physician has one disadvantage. He sees his patients too late. . . . The man in the street thinks of the doctor too often as some one upon whom to fall back on only when all other measures have failed. The pharmacist, on the other hand, is the border patrol. He sees the enemy long before it reaches the Maginot Line of Medicine. Upon the discretion of the druggist, upon his good judgment, and upon his professional integrity rest the decisions which may mean health or illness, even life or death, in the lives of many of our citizens."

"The active and moral support of pharmacists is virtually without equal in the growing and successful onslaught against syphilis and gonorrhea."

"The practicing pharmacist is entitled to status as a member of one of the oldest professions. His calling measures up to all of the requirements of a profession. He renders a service which is recognized as vital to the welfare of the community. He has an important part in the indispensable task of maintaining the public health and in prolonging life."

And now comes the pleasing announcement as given on page 49 of this issue, that the U. S. Office of Education Radio Division will honor the American pharmacist in the "World Is Yours" broadcast over a

nationwide network on Sunday, March 24th. The A. PH. A. was requested to give the release wide distribution, which has been done. This broadcast will be supplemented by a specially prepared bulletin bearing the significant title, "American Pharmacy—First Line Defense Against Disease." The radio script will be loaned through the Script Exchange of the Office of Education to schools, colleges and civil groups and this educational service is sponsored by the Federal Radio Education Committee of the Federal Communications Commission.

Every pharmacist should tune in on this program and should bring it to the attention of his patrons. The script will be available for state and local associations and pharmacists should see that civic and other organizations are informed about it.

This program represents splendid cooperation by the Office of Education and affords the pharmacists of the country an exceptional opportunity to assist in informing the public about their professional services.—E. F. K.

U. S. Office of Education Radio Division to Honor American Pharmacist in Broadcast

Commissioner John W. Studebaker of the U. S. Office of Education recently announced that "American Pharmacy" will be the subject of the *World Is Yours* broadcast over the nationwide NBC Red network, at 4.30 P.M., E.S.T., Sunday, March 24th.

"American Pharmacy" will be a tribute to the corner druggist, as well as to the men in the laboratories, and will dramatize little-known and forgotten incidents which had their part in the development of this profession from its very small and crude beginnings to its present important position in the safeguarding of the health of the community, state and nation. The broadcast is one of the *World Is Yours* series which each Sunday dramatizes the results of Smithsonian Institution research covering history, physics, anthropology and other fields.

Pioneering with the use of radio-reading materials the U. S. Office of Education and the National Broadcasting Company publish each week the *World Is Yours* bulletin to parallel the *World Is Yours* broadcasts. Prepared with the coöperation of the Smithsonian Institution staff, these weekly bulletins were inaugurated after thousands of listeners had persistently requested supplementary material. The booklet on American Pharmacy titled: "American Pharmacy—First-Line Defense against Disease," is by Charles Whitebread, Curator of Medicine and Public Health at the Smithsonian Institution and may be obtained by sending ten cents to "*The World Is Yours*," Washington, D. C.

Presentation on the air as a live broadcast is only a "première" for the U. S. Office of Education program. Hundreds of performances by schools, colleges and civil groups by local stations follow. This is made possible by the Script Exchange in the U. S. Office of Education which lends scripts for local, noncommercial use and makes available recordings at low cost. The Federal Radio Education Committee, created by the FCC to promote improved broadcast-educator relationships, sponsors this educational service.

The Script Exchange preserves outstanding scripts produced not only by the U. S. Office of Education but also by other Government agencies, as well as those of local educational groups. Now in its fourth year, the Script Exchange has made available more than 250,000 copies of scripts to some 12,000 groups in all parts of the country.

The *World Is Yours* program is now four years old and now is heard by over 4,000,000 in all parts of the United States and some foreign countries.

Correction

In the report of the 17th Annual Plant Science Seminar (JOUR. A. PH. A., Nov. 1939, page 941, line 10) it is stated that 145 trees are listed for North Carolina. It should have been stated that the 145 trees are listed for the North Carolina mountain region, there being 223 trees listed for the entire state of North Carolina.

CALLING ALL MEMBERS!

With the A. PH. A. Convention date not much more than two months off, May 5th, it would be greatly appreciated by the Secretaries of the Sections, and also by Secretary Kelly, if all members desiring to present papers at the Richmond meeting would send in promptly the titles of their papers, together with abstracts. The entire Program will be printed in the April JOURNAL and it is imperative that these titles be sent promptly to the Section Secretaries in order that they may be grouped and forwarded to the Editor, E. F. Kelly, PRACTICAL PHARMACY EDITION. The Secretaries plan to close the Section programs on March 15th, and hope to present the usual number of papers. The fact that the Convention dates are advanced about four months this year means that all of us must put forth added zeal and effort. We wish to thank you in advance for your kind coöperation.

Examination for Pharmacists— Medical Administrative Corps, Regular Army

As a result of the examination held for pharmacists on November 13-17, 1939, the Medical Department of the Army announces that seven candidates were successful, as follows: Paul C. Larnce, San Antonio, Texas; Elliott P. Rigsby, Chapel Hill, N. Car.; Thomas F. Criswell, Jr., Brian, Texas; Emerson B. Taylor, Seattle, Wash.; Woodrow C. Herbert, Salt Lake City, Utah; Edward C. Rogowski, Chicago, Ill.; Charles J. Mrazek, Jr., Chicago, Ill.

Of the successful candidates, the first five named have been commissioned as Second Lieutenants in the Medical Administrative Corps, Regular Army. The other two named will be held until vacancies occur.

Philadelphia College of Pharmacy and Science celebrated Founders' Day, February 23rd. Dr. Paul S. Pittinger delivered an address on "Increased Opportunities for Graduates in Pharmacy, Pharmaceutical Chemistry and the Allied Sciences of Bacteriology and Biology." In the evening there was an informal dinner for all alumni, followed by a full evening of entertainment including a talk, music and fencing. Danceing followed.

The English We Use

*By Edward M. Durand**

Too often we do not give enough thought to the English we use in our letters, in our everyday speech, and in our more formal talks before one group or another. We often feel satisfied with saying a thing, regardless of how it may sound or of whether it gives our exact meaning. In some way we have a belief that care and exactness are associated with the pedagogue, whose interest, we believe, is purely academic.

But consider for a moment. The value of clear and concise expression is self-evident. The one who can understand clearly what is said and meant and can say clearly and concisely what he means has a very powerful implement with which he can work.

This person, first of all, is sure to have more confidence in himself than the one who is hesitant, awkward and faulty in his understanding and speech. The knowledge that his English is correct and exact and the realization that he can interpret correctly the speech of others give him a sureness in his contacts that places him above the others.

Then, too, we should not underestimate the effect of good English upon our hearers. The user of correct English, which is devoid of slang, trite sayings and colloquialisms, instils respect and confidence into those who hear him. One of the most common measures of a man's education is the language that he uses. This is true of everyone. Our respect is shattered when we detect ungrammatical and careless English.

If all that has been said is true for people in general, how much more it applies to the pharmacist! The pharmacist, as the doctor and the educator, has the dignity of his profession to build up and maintain. If we are to keep Pharmacy on the plane of a profession, we must give more thought to the English we use in our contacts with those whom we would have consider Pharmacy as a profession.

Although it is true that English, or the language he uses, does not make the man,

* Department of English, Rutgers University, College of Pharmacy.

nevertheless it does often tell what he is. To the hearer the man who uses poor or careless language is considered to be poor and careless in his work as well. Can any pharmacist desire to be so regarded?

Surely the pharmacist wants to be considered, above all, as a careful, exact and painstaking individual, in whom people will have the utmost confidence. In no small measure such confidence will come to him if he is careful of the English he uses.

Am I Eligible?

Some Information about Interstate Reciprocity

The answer to this question relating to reciprocal registration is important, so the safest plan is not to jump to conclusions but take the time to write to an authoritative source for information, particularly when it is available without cost.

Free Opinion Service

First write to the office of the National Association of Boards of Pharmacy, 130 N. Wells St., Chicago, for a preliminary information blank. Fill this blank in with care, as the opinion cannot be expected to stand up in the later investigations, unless you have given accurate and truthful information. There is no charge for this service. Also bear in mind that California and New York are not affiliated with the N. A. B. P. as active members, so there is no reciprocity either to or from those states.

The Need for a Central Clearing House

The central office of the N. A. B. P. is really a clearing house for interstate reciprocity. All reciprocal applications are issued by this office. Permanent files and a perpetual card index are kept on all reciprocal transactions.

In order to determine whether or not a pharmacist is eligible in a given state, it has been necessary to build up information files both on pharmacy laws and also board rulings and attorney generals' opinions, not only for the present, but also the past, as

each case is judged by the entrance standards in effect at the time of original examination. It is a physical impossibility for any board member or secretary to keep posted on these many items; also it would be a waste of money and effort to have each of the forty-eight states duplicate this work when it can be handled more efficiently from a central source.

Play Safe

Remember then to check first before you make definite plans to move or obligate yourself to buy a store across state lines. Save time, money and possible disappointment. Know before you go. Don't assume that because John Smith got a reciprocal license you will too; your qualifications may be different, or even entrance standards, depending on date of original registration.

Basic Rule for Reciprocity

You may want to have a general idea of where you are eligible by reciprocity, even though you have no specific plans for the immediate future in mind. A few rules may illuminate this rather abstract and technical subject of reciprocity.

What is called the "basic rule for reciprocity" reads as follows: "The applicant must have had the legal qualifications at the time of examination and registration in the state from which he applies which would *at that time* have enabled him to qualify for examination and registration in the state to which he is applying for reciprocal registration."

Just what does this mean? Simply that if you registered in Illinois, for example, in 1922, you will be eligible *now* in any other member state that would have admitted you to its examinations in 1922 on the qualifications you possessed at that time.

Subsequent Experience Requirement

Generally speaking, it is wise, too, to remain for one full year in the state of examination, after licensing, and practice there. Some states enforce a subsequent experience requirement of one year, which must be met in reciprocity.

Unavoidable technicalities sometimes arise because the various states, in their laws, require a different amount of practical experience with the college degree. Also the methods of evaluating or counting up experience are sometimes unlike. The list of recognized colleges of pharmacy may vary according to state. All these items must be carefully checked by our experienced personnel before an opinion is given you.

Evasion a Folly

After reading the basic rule for reciprocity, you will realize that the unregistered clerk, who goes to a distant state where no college is required and passes the board examination, has no hope of obtaining a reciprocal license back home, where graduation is compulsory inasmuch as he could not qualify to the entrance standard.

At the present time, there are three such low standard states (after June 1940 only two) and a license as a non-graduate issued at this time will only carry with it reciprocal privileges in the other states of the same classification—a maximum of two states. Such an attempt at evasion is only a waste of time and money.

The Cost of Reciprocity

What is the cost of reciprocity? The national fee, payable to the N. A. B. P. for the official application, is \$25.00. In addition, there is a state license fee which varies according to the law of the particular state—all the way from a low of \$10.00 to a high of \$50.00 but few states are in the latter class. The N. A. B. P. has made it a policy for years to protest the enactment of legislation which places the reciprocal registration fee of the individual states higher than the examination fee, and most states have cooperated.

Comparison with Medicine

In medicine, where no concerted effort has been made to keep down the fees for reciprocal or credential registration, many of the states charge from \$50.00 to \$100.00, although the examination fee, as in pharmacy, is usually only \$15.00 or \$25.00. Thus the budget for reciprocity which the pharmacists

themselves provide in the payment of the national fee has been devoted, in part, to keeping the state fees on a fair and equitable basis.

The N. A. B. P. is incorporated "not for

profit" in Kentucky and audited accounts are published annually in the Proceedings as well as a detailed listing of all reciprocal registrations, including name of applicant and states involved.

U. S. P. Anti-Anemia Preparations Advisory Board

THIRD ANNOUNCEMENT

Criteria Used by the United States Pharmacopoeia Anti-Anemia Preparations Advisory Board in Assigning Unitage to Anti-Anemia Preparations

In assigning units to preparations of liver extract or other anti-anemia preparations, the following points will be considered in connection with other available data from therapeutic tests conducted in the manner specified in former announcements:

1. The character and degree of the reticulocyte response.
2. Rate of increase of red blood cells.
3. Clinical factors modifying these responses.
4. Efficiency of the method of manufacture in preserving the potency of the product.
5. The following figures will be especially useful to the Board in assigning unitage.

Initial Red Blood Cell Count (Millions per Cubic Millimeter)	Peak of Reticulocyte Curve (Per Cent)
1.0.....	41.8
1.5.....	28.4
2.0.....	18.6
2.5.....	11.1
3.0.....	5.1

6. The accompanying graph (see Fig. 1) gives the range of red blood cell increases, per week, for various initial red blood cell counts, to serve as a guide in the evaluation of red blood cell increases.

The figures and curves are not to be considered as "standards," inasmuch as modifying factors in each patient may change the interpretation of the type and degree of the response.

7. Appropriate laboratory data obtained in accordance with previously issued instructions should be submitted on the special blanks provided. In addition to the calen-

dar date of each treatment, the number of days of therapy, starting with the first day of administration as 0, should be added in the left-hand margin.

8. Special graph paper is provided for plotting the data (in red ink) on red blood cell responses.

Additional Products to Which U. S. P. Anti-Anemia Unit Value Has Been Assigned

The following additional preparations have been assigned unitage by the Anti-Anemia Preparations Advisory Board:

ALFINGOL CORPORATION, New York City.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

(a) 0.2 cc. equals 1 unit (injectable)

(b) 0.1 cc. equals 1 unit (injectable)

ARMOUR AND COMPANY, Chicago, Illinois.

Extractum Hepatis (in oil suspension). Extract of Liver in Oil Suspension

9 capsules equal 1 unit (oral)

THE CENTRAL PHARMACAL COMPANY, Seymour, Indiana.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

HARVEY LABORATORIES, INC., Philadelphia, Pennsylvania.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

(a) 0.1 cc. equals 1 unit (injectable)

(b) 0.2 cc. equals 1 unit (injectable)

THE HARROWER LABORATORY, INC., Glendale, California.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

HIGH CHEMICAL COMPANY, Philadelphia, Pennsylvania.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

Name.....Case No.....

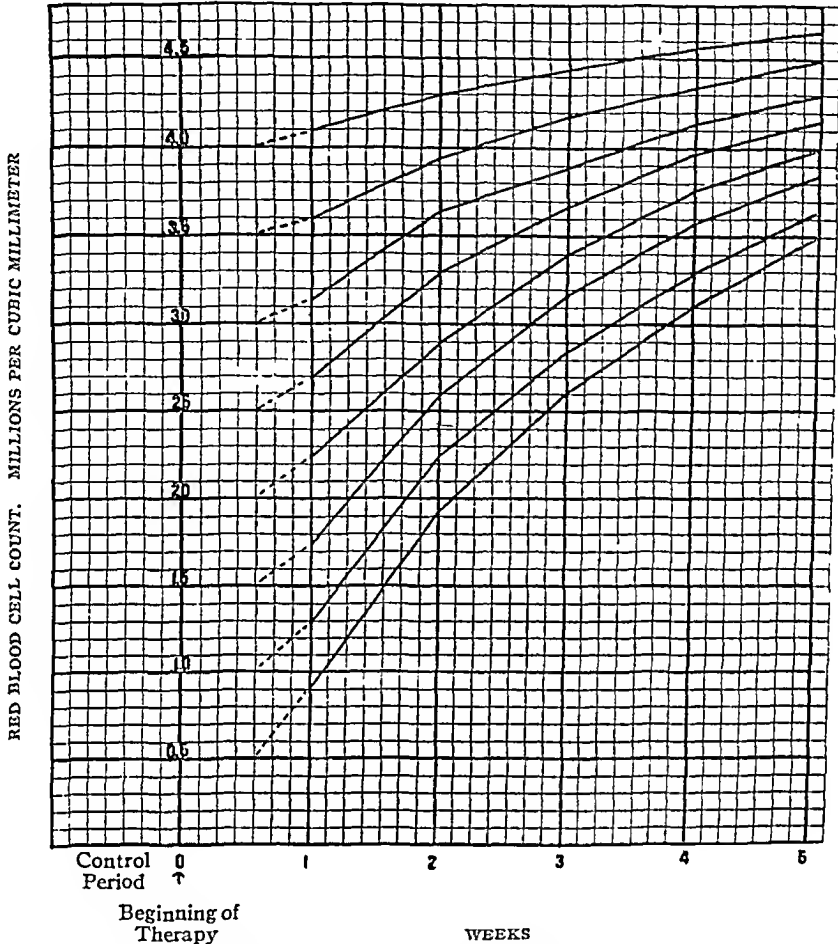


Fig. 1.—Range of red blood cell increases, per week, for various initial red blood cell count.

- (a) 0.1 cc. equals 1 unit (injectable)
 (b) 0.2 cc. equals 1 unit (injectable)

HOSPITAL LIQUIDS, INC., Chicago, Illinois.

Liquor Hepatis Purificatus. Parenteral Solution of Liver
 0.1 cc. equals 1 unit (injectable)

KEYSALL PHARMACAL Co., San Francisco, California.

Liquor Hepatis Purificatus. Parenteral Solution of Liver
 0.1 cc. equals 1 unit (injectable)

THE LAKESIDE LABORATORIES, INC., Milwaukee, Wisconsin.

Extractum Hepatis. Dry Liver Extract
 50 capsules (25 grams) equal 1 unit (oral)

Liquor Hepatis Purificatus. Parenteral Solution of Liver
 0.5 cc. equals 1 unit (injectable)

ELI LILLY AND Co., Indianapolis, Indiana.

Liquor Hepatis Purificatus. Parenteral Solution of Liver
 1 cc. equals 1 unit (injectable)

LOESER LABORATORIES, INC., New York City.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

- (a) 0.1 cc. equals 1 unit (injectable)
 (b) 0.2 cc. equals 1 unit (injectable)

THE WM. S. MERRELL COMPANY, Cincinnati, Ohio
 Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

WILLIAM H. RORER, INC., Philadelphia, Pennsylvania.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

G. H. SHERMAN, M.D., Inc., Detroit, Michigan.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

THE SMITH-DORSEY CO., Lincoln, Nebraska.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

E. R. SQUIBB AND SONS, Brooklyn, N. Y.

Extractum Hepatis (in oil suspension). Extract of Liver in Oil Suspension

9 capsules equal 1 unit (oral)

THE STANDARD CHEMICAL CO., INC., Des Moines, Iowa.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

THE UPJOHN COMPANY, Kalamazoo, Michigan.

Extractum Hepatis. Dry Liver Extract

9 capsules (4.5 grams) equal 1 unit (oral)

Liquor Hepatis. Liquid Extract of Liver

45 cc. equals 1 unit (oral)

VALENTINE MEAT JUICE COMPANY, Richmond, Virginia.

Extractum Hepatis. Dry Liver Extract
27 grams equal 1 unit (oral)

VINCENT CHRISTINA, INC., New York City.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

THE WARREN-TEED PRODUCTS CO., Columbus, Ohio.

Liquor Hepatis Purificatus. Parenteral Solution of Liver

0.1 cc. equals 1 unit (injectable)

The Advisory Board will, as occasion arises, issue supplementary announcements either as a revaluation of the above products based upon new clinical data or to make a report upon new products which are submitted.

U. S. P. ANTI-ANEMIA PREPARATIONS ADVISORY BOARD

February 1, 1940

Suggested Amendments in the Constitution and By-Laws of the United States Pharmacopoeial Convention, Offered by the Board of Trustees for the Consideration of the Members of the Convention

Article II of the Constitution has been objected to upon the ground that its language is unnecessarily confusing, that it does not separate the institutions designated by class names from those designated by specific titles, and that the qualifications for membership and for the acceptance of credentials are unnecessarily distributed through two separate sections.

In order to enable the Convention to express its will upon these several points it is proposed to recast the Article as follows:

(1) To assemble in one paragraph all of the institutions and organizations which are designated by general class names such as "Incorporated Medical Associations," etc.

(2) To assemble in a second paragraph all of the institutions which are designated by specific titles, such as "The American Chemical Society," etc.

(3) To include in a separate section all regulations relating to the appointment of delegates, the acceptance of credentials, etc.

In addition to the above changes in arrangement, the amendment if adopted will have the effect of admitting delegates from six new organizations, the "American Pharmaceutical Manufacturer's Associations," the "American College of Physicians," the "American College of Surgeons," the "American Hospital Association," "The Rockefeller Institute for Medical Research" and the "American Veterinary Medical Association."

Perhaps the most important change is that proposed in Section II, which definitely provides that all delegations shall have equality of voting power whether one or three delegates are present at the Decennial Meeting.

Some such provision seems to be necessary, if institutions and societies located at great distances from Washington, are not to be placed at great disadvantage as compared to those near by.

The several amendments proposed are as follows: Amend Article II of the Constitution to read as follows:

ARTICLE II

Membership

"Section I. Members of the United States Pharmacopoeial Convention shall consist of delegates representing the following institutions and organizations and the herein designated representatives of the Federal government:

"Incorporated Medical Colleges, and Medical Schools connected with incorporated Colleges and Universities; Incorporated Colleges of Pharmacy, and Pharmaceutical Schools connected with Incorporated Universities; Incorporated State Medical Associations; Incorporated State Pharmaceutical Associations, and the organizations not herein named which were admitted to the U. S. P. Convention."

Name..... Case No.....

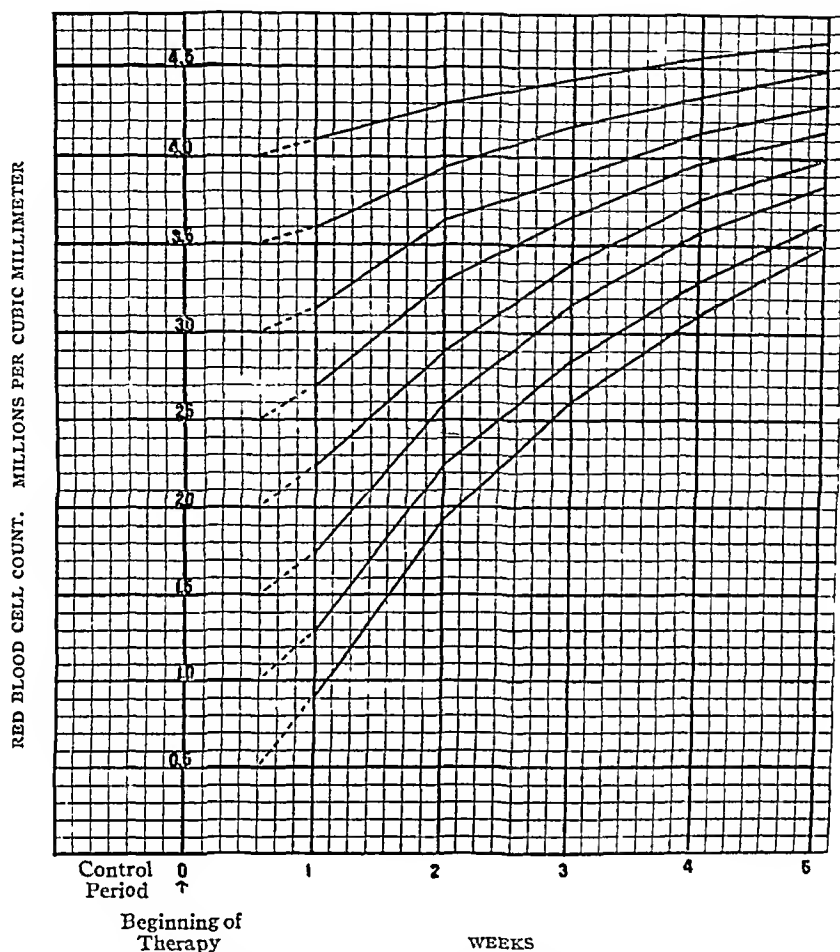


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In order to enable the Convention to express its will upon these several points it is proposed to recast the Article as follows:

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(2) To assemble in a second paragraph all of the institutions which are designated by specific titles, such as "The American Chemical Society," etc.

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In addition to the above changes in arrangement, the amendment if adopted will have the effect of admitting delegates from six new organizations, the "American Pharmaceutical Manufacturer's Associations," the "American College of Physicians," the "American College of Surgeons," the "American Hospital Association," "The Rockefeller Institute for Medical Research" and the "American Veterinary Medical Association."

Perhaps the most important change is that proposed in Section II, which definitely provides that all delegations shall have equality of voting power whether one or three delegates are present at the Decennial Meeting

Some such provision seems to be necessary, if institutions and societies located at great distances from Washington, are not to be placed at great disadvantage as compared to those near by.

The several amendments proposed are as follows:

Amend Article II of the Constitution to read as follows:

ARTICLE II

Membership

"Section I. Members of the United States Pharmacopoeial Convention shall consist of delegates representing the following institutions and organizations and the herein designated representatives of the Federal government:

"Incorporated Medical Colleges, and Medical Schools connected with incorporated Colleges and Universities; Incorporated Colleges of Pharmacy, and Pharmaceutical Schools connected with Incorporated Universities; Incorporated State Medical Associations; Incorporated State Pharmaceutical Associations, and the organizations herein named which were admitted to represent."

tion in the Convention of 1900, provided, however, that no such institution or organization shall be entitled to representation in the Convention unless it shall have been incorporated within the United States, and shall have been in continuous operation for at least five years preceding the date fixed for the Decennial Meeting of the Convention.

"Also the American Medical Association; the AMERICAN PHARMACEUTICAL ASSOCIATION; the American Chemical Society; the National Association of Retail Druggists; the National Association of Boards of Pharmacy; the Federation of State Medical Boards of the United States; the Association of Official Agricultural Chemists; the Association of American Dairy, Food and Drug Officials; the National Wholesale Druggists' Association; the American Dental Association; the American Drug Manufacturers' Association; the American Pharmaceutical Manufacturers' Association; the Mellon Institute of Industrial Research, of the University of Pittsburgh; the School of Hygiene and Public Health of Johns Hopkins University; the American College of Physicians; the American College of Surgeons; the American Hospital Association; The Rockefeller Institute for Medical Research; the American Veterinary Medical Association; also delegates appointed by the Surgeon General of the United States Army; the Surgeon General of the United States Navy; the Surgeon General of the United States Public Health Service; the Secretary of Agriculture; the Secretary of Commerce; and United States Division of Customs.

"Also such Medical and Pharmaceutical Associations, and such Colleges of Medicine and Pharmacy in Hawaii, Puerto Rico, the Philippines and the Republic of Cuba as have been approved by the Board of Trustees.

"*Section II.* Each institution, organization and Governmental representatives designated in the preceding Section shall be entitled to send not exceeding three delegates to the Decennial Meeting of the Convention. In order to insure equality of voting power for all organizations, institutions and Governmental Divisions represented at the meeting, each delegation shall be entitled to one vote upon all questions. In case of difference of opinion among the members of any delegation, each member of such delegation shall be entitled to a proportionate share of one vote.

"Delegates shall be elected or appointed in such manner as their several institutions or organizations shall provide, but no delegates shall be accepted as members of the Convention unless their credentials shall comply with the provisions of the By-Laws, and shall have been examined and approved as provided therein.

"Delegates admitted as members at any decennial meeting shall continue to be members of the United States Pharmacopœial Convention until the organization of the next ensuing decennial meeting of the Convention."

ARTICLE IV

Committee and Trustees

It is proposed that the language "Nominating Committee" be stricken out of this article, for the reason that this is a Special Committee which functions only once, and its creation and operation are fully and adequately provided for in Chapter VI of the By-Laws.

ARTICLE VI

Amendments

It will be observed that according to the provisions of Article VI, the Convention is powerless to consider any amendment unless it shall have been approved by the Board of Trustees, and submitted to the Medical and Pharmaceutical Press, at least three months prior to the assembling of the Decennial Meeting.

It is proposed to liberalize this Article by making it possible for the Convention to consider and act upon amendments which are presented to it during the first session of the Decennial Meeting. The requirement of a three-fourths vote for the adoption of amendments should be sufficient safeguard against hasty and insufficiently considered action.

It is, therefore, suggested that Article VI be amended by adding an additional paragraph to read as follows:

"Additional amendments may be presented in writing at the first session of the Decennial Meeting of the Convention, and shall be referred to the Board of Trustees. The Board of Trustees shall report upon such proposed amendments at the next succeeding session, when they may be acted upon as in other cases."

PROPOSED AMENDMENTS TO THE BY-LAWS

Chapter IV

Amend Chapter IV of the By-Laws by inserting after present Article II a new Article to read as follows:

"ARTICLE III. Upon recommendation of the General Committee of Revision, the Board of Trustees shall have authority to issue a second revision of the Pharmacopœia within any one decade and shall have authority to issue such Interim Revision Announcements and such Supplements to the Pharmacopœia as from time to time may be deemed necessary to maintain the Pharmacopœia as an effective standard."

The adoption of this amendment would change the numbering of the succeeding Articles of Chapter IV from III, IV and V, to IV, V and VI respectively.

Chapter V

Under the existing By-Laws, both the General Committee of Revision and Executive Committee of Revision must be selected from delegates actually present at the Decennial Meeting of the Convention. Occasionally it occurs that experts best qualified to pass upon specific questions which arise in the work

of revision have not been present at the Convention. In order to permit the Convention to avail itself of the services of such experts, it is proposed that:

Article I of Chapter V be revised by inserting after "members" on the second line, the following words: "of whom at least forty-five shall be members of the Convention." The article will then read as follows:

"The General Committee of Revision shall consist of fifty members, of whom at least forty-five shall be members of the Convention, to be elected at the Decennial Meeting, together with the president of the Convention, *ex-officio*. The business of the Committee may be transacted by correspondence."

Chapter VIII

If the previously proposed amendments to Article II of the Constitution shall have been adopted, omit the last sentence of Article I of Chapter VIII of the By-Laws, which reads as follows: "Each member shall be entitled to only one vote in the Convention upon all questions."

Interim Revision Announcement Concerning the U. S. P. XI Standards for Scarlet Fever Streptococcus Toxin

An important modification in the manufacture of Scarlet Fever Streptococcus Toxin has been developed by the Scarlet Fever Committee, Inc., and this has received the approval of the National Institute of Health. The introduction of a limited amount of peptone and the exclusion of meat extractive is the important change.

The U. S. P. Sub-Committee on Biological Products recommended that the Pharmacopœia conform to this accepted procedure, especially since it is said to reduce the toxicity of the product. The following U. S. P. "Interim Revision Announcement" has therefore been approved by the Committee of Revision and Board of Trustees and its release authorized.

A date six months from the time when this announcement is released is fixed for the enforcement of this revised monograph. This date is August 1, 1940.

The revised text reads as follows:

TOXINUM SCARLATINÆ STREPTOCOCCICUM

Scarlet Fever Streptococcus Toxin

Toxin, Scarlet, Streptococ.—Scarlet Fever Streptococcus Toxin, Scarlet Fever Toxin for Immunization and for the Dick Test.

Scarlet Fever Streptococcus Toxin is a sterile solution in a medium containing not more than 1 per cent of peptone but no meat extractive, of certain products including a soluble toxin, resulting from the growth in the broth of suitable strains of hemolytic streptococci (*Streptococcus scarlatinae*).

Description and physical properties—A transparent liquid having the color of the medium in which it is made and having a slight odor which is often altered somewhat by the antiseptic used as a preservative.

The remainder of the U. S. P. XI text, page 410, beginning with the 13th line from the top of the page, starting "No horse blood or other foreign blood shall . . ." remains unchanged.

E. FULLERTON COOK, *Chairman of the
Committee of Revision of the U. S. Pharmacopœia*
February 1, 1940

Second Call for the Decennial Convention of the U. S. Pharmacopœia

In compliance with the provisions of the Constitution and By-Laws of the United States Pharmacopœial Convention, I hereby issue this second call to the several bodies entitled under the Constitution to representation therein to appoint three delegates and three alternates to the Decennial Meeting of the Convention for the Revision of the Pharmacopœia of the United States of America, which is to meet in Washington, D. C., on May 14, 1940.

WALTER A. BASTEDO, M.D.,
*President of the United States
Pharmacopœial Convention*

NOTICE—in order that the records may be brought up to date and checked, that card files may be prepared and that the other functions of the Committee on Credentials may be performed, it is desirable that the Credentials of all Delegates appointed to attend this Decennial Meeting shall be in the hands of the Secretary, Mr. L. E. Warren, 2 Raymond St., Chevy Chase, Maryland, not later than March 15, 1940.

Testimonial Dinner to President-Elect Charles Hall Evans

Arrangements have been completed for this testimonial which will be held at the Atlanta Biltmore Hotel, Atlanta, on Tuesday evening, March 5th. The dinner is being tendered by the pharmacists of Georgia. Ladies are especially invited and the affair will be informal. A cordial invitation is extended to pharmacists of other states to attend and a fine attendance is indicated. Mr. Charles D. Jordan will act as toastmaster and reservations may be made directly to Z. O. Moore, secretary of the Georgia Pharmaceutical Association, Atlanta.

National Pharmacy Week

What is National Pharmacy Week? That is a question which is asked of pharmacists thousands of times during each annual observance, and to this question there can be but one answer. National Pharmacy Week is a period of the year during which the pharmacists of America demonstrate to the public some of the things that their profession represents.

For many people the development of commercial Pharmacy has obscured the fact that the drug store has basically only one reason for existence; the presence of a highly trained professional man, who alone is qualified by education and permitted by law to dispense medicinal substances and compound prescriptions. I need not tell a pharmacist what educational requirements he must meet, nor the training he must possess. But many people are unaware of these and other important facts; and we hope through the National Pharmacy Week program to assist in correcting the wrong impression which the public holds of our profession.

In correcting this impression we will establish the profession at the high level which it rightfully deserves, and make it more profitable to the present members of the profession.

The week of October 20th to the 26th has been set for the 1940 observance of National Pharmacy Week and knowing that for its ultimate success, we need the active support of all organized pharmacy as well as the cooperation of every pharmacist, the National Committee in charge of this observance is soliciting such support and cooperation which will insure the success of this year's observance.

It is the desire of the National Committee that the president of each State Pharmaceutical Association stress the importance of this program in his annual address and that he appoint a committee on National Pharmacy Week within his own state and urge upon them the necessity of actual work in order that the aims and purposes of National Pharmacy Week will succeed.

The National Committee further recom-

mends that every state association award a suitable trophy to the best Pharmacy Week window installed within their state during the 1940 observance, since it has been proven in the past that in states where such awards have been made there has been greater interest and more unified cooperation.

In this series of articles which I hope to have appear monthly between now and October, I must necessarily be brief, but they will be written with a thought of enlisting every pharmacist in America into the 1940 National Pharmacy Week observance with the hope that it will be the most successful in the history of our program and that pharmacy will be benefited.

JOHN O'BRIEN, *Chairman,*
National Pharmacy Week Committee

National Health Program

On January 30th President Roosevelt sent a special message to Congress in which two definite recommendations were submitted. The following comment was made with respect to the Wagner Bill, S 1620.

"In my special message to the Congress on January 23, 1939, I expressed my concern over the inequalities that exist among the states as to health services and resources with which to furnish such services. With that message I transmitted the report and recommendations on national health prepared by the Interdepartmental Committee to Coordinate Health and Welfare Activities and recommended it for careful study by the Congress.

"Conditions described a year ago are substantially unchanged to-day. There is still needed for the Federal Government to participate in strengthening and increasing the health security of the nation. Therefore, I am glad to know that a committee of the Congress has already begun a careful study of health legislation. It is my hope that such study will be continued actively during the present session, looking toward constructive action at the next. I have asked the Interdepartmental Committee to Coordinate Health and Welfare Activities to continue its studies."

Miss Josephine Roche, who acted as Chairman of the Interdepartmental Committee to Coordinate Health and Welfare Activities, has been called from retirement to direct the continued study suggested in this message.

It was also stated in the message that "in order that at least a beginning may be made, I now propose for the consideration of Congress a program for the construction of small hospitals in needy areas of the country, especially in rural areas not now provided with them."

It was further recommended that an appropriation of \$10,000,000 be made for the first year, for the purpose of constructing and equipping hospitals at an estimated cost of \$150,000 and \$200,000, which would provide for about fifty such units. Areas making application for hospitals will be required to demonstrate the need for such a unit and show that the financial support for the operation of the unit can be provided. Representatives of recognized medical and hospital authorities are to act as an Advisory Council to the Surgeon General of the U. S. Public Health Program in carrying forward this project if Congress acts favorably. The Advisory Council is also expected to develop standards covering the services to be rendered by these hospitals, if authorized, and to see that the standards are maintained.

Senator Murray of Montana, chairman of a sub-committee of the Senate Committee on Education and Labor, considering the Wagner national health bill is quoted as referring to the pending new proposal for Federal construction of hospitals in communities needing them as only a "small beginning on the national health program now. The hospital bill is not, nor is it intended by the President to be a substitute for the broad long-range program outlined in the health bill."

Pointing out that the Wagner bill probably would not be enacted this session, he stated there was time yet to perfect it. The general idea of the Wagner bill, he said, was approved by the American people and the measure could be "effective only if it provides a sound basis for the loyal and co-operative work of the qualified professional workers."

Senator Wagner introduced S. 3230 and Representative Lea H. R. 8240, which are companion measures to carry out the President's program.

National Dental Program

By G. C. Schicks, Chairman

The first series of prescription formulas to the dental profession will appear in the March edition of the *Journal of the American Dental Association*. These may or may not have engaged the attention of the busy dentist. In any event, the greatest value from the coöperative program with the dental and pharmaceutical professions may be obtained if the pharmacist will bring these formulas to the attention of the dentists in his neighborhood. The information in the *A. D. A. Journal* relative to uses, incompatibilities, properties and possible combinations is very concise. This will give the pharmacist an opportunity to elaborate on the formulas with helpful information.

The first series has to do with pain-relieving drugs—analgesics. This is probably one of the most useful classes of drugs. The dentist is just as desirous of having his patients properly treated where pain is present as is any other medical practitioner. Before interviewing the dentist on analgesic drugs and preparations the pharmacist should read the following articles so that he may have at his command valuable information which he may impart or be prepared to answer questions concerning:

"Agranulocytosis: A Critical Review of Causes and Treatment, Historical and General," *Journal A. D. A.*, Vol. 22, March 1935, p. 487; "Some Aggravated Forms of 'Aspirin'itis,' a Growing Menace That Should Be Checked," *Journal A. D. A.*, Vol. 17, July 1930, p. 1359; "Dangerous Drugs under the New Federal Laws," *Journal A. D. A.*, Vol. 25, Oct. 1938, p. 1678; "Pre-medication and Post-medication for Dentists and Oral Surgeons," *Journal A. D. A.*, Vol. 21, March 1934, p. 522; "Uses of Pain Relievers in Fixed Proportions by Dentists," *Journal A. D. A.*, Vol. 18, April 1931, p. 746.

All these articles are published in the *A. D. A. Journal* and may be found in a college of pharmacy library, the library of the State Dental Association, the office of your dentist, a dental or medical college library.

If you have not ordered "Accepted Dental Remedies" from the American Dental Association, 212 East Superior Street, Chicago, Ill., at \$1.00 a copy, do it now. Read the regulations for Council-Accepted medication. Learn what this publication has to say about the analgesic drugs called for in the first set of dental prescriptions. This little book presents an excellent, short course in dental materia medica. It should be a part of the reference library of every prescription pharmacy. Give reading assignments in this book to all prescription clerks in the store. At least cover those drugs in each series of dental formulas. Question the clerks on the assignment. This will bring out a helpful discussion which will add much to the efficiency of the prescription department.

When you have completed a morning or afternoon of visiting dentists at their offices relate your experiences to any other prescription clerks in the store. You will be agreeably surprised with the number of valuable suggestions these visits will bring and the number of ways you can be of assistance to the dentist. Arrange a definite day and time each week for interviews and do not let other things change your plans. When interviews are not possible communication by mail is always available.

Information for the Dentist

As a convenience to the dentist in the treatment of pain the following prescription formulas are presented. These important analgesics are called for in average doses and in a form which can readily be changed to meet the conditions under treatment. Average doses usually bring relief. If not, a double dose may be used, with the exception of aminopyrine. The average dose (5 grains) for aminopyrine is usually the maximum dose as well. When this larger dose proves unsatisfactory it is best to change to another drug.

Effect from these formulas may be expected in about one-half hour. They are absorbed from the gastro-intestinal tract and eliminated through the urine. These

drugs are well tolerated by most patients. Some may, however, develop acute symptoms from a single dose. In such cases the reaction subsides when the medication is withdrawn. Acetanilid is probably the chief offender. Aminopyrine should also be administered with caution. Preparations containing acetanilid and aminopyrine are best prescribed in quantities to last for a definite period of time, and when advisable the prescription should indicate to the pharmacist that it is not to be repeated. Persons sensitive to these drugs may present gastric disturbances, rash and nervous conditions.

Acetylsalicylic acid is the safest of the analgesics for children and adults. Persons troubled with hyperacidity will tolerate it better if it is combined with an equal quantity of sodium bicarbonate. It is not habit forming. Acetophenetidin is an efficient analgesic and often brings relief when acetylsalicylic acid does not.

All the coal-tar analgesics mentioned have antipyretic properties. Analgesic drugs are sometimes combined with barbiturates, as with the Elixir of Phenobarbital and Elixir of Aminopyrine for sedation and pain.

These prescriptions, with the exception of Compound Acetanilid Powder, may be used as an aid in the control of pain resulting from operations, neuralgias, headache and other painful conditions. Acetanilid is usually contraindicated after operations.

(a) R _x	Metric Approx.	Apoth. Equivalents
Tab. acid		
Acetylsalicylici	0.3 Gm.	gr. V
*Dentur tales doses No. XII		
Sig: One tablet with a glass of water for pain		
Repeat in half hour if necessary.		
Note: Analgesic—Pain.		
Common name: Aspirin.		
*Means—give such doses.		

(b) R _x	Metric Approx.	Apoth. Equivalents
*Tab. Aminopyrinæ	0.3 Gm.	gr. V
**Dentur tales dose No. X		
Sig: One tablet with water for pain.		
Repeat in four hours if necessary.		

Note: Analgesic—Pain. Prescription required.
Usually only a single dose is administered per day.
Dangerous for sensitive individuals, especially if given repeatedly.
Maximum dose—5 gr.
0.3 Gm. = 5 gr. each dose.

*Proprietary name—Pyramidon.

**Means—give such doses.

(c)		Metric	Apoth.
R		Approx.	Equivalents

*Tab. Acetophenetidini 0.3 Gm. gr. V

**Dentur tales doses No. X

Sig: One tablet with water. Repeat in two hours for pain.

Note: Analgesic—Pain.

When Acetylsalicylic Acid and Aminopyrine are not indicated.

0.3 Gm. = 5 gr. each dose.

Maximum dose—15 gr.

*Proprietary name—Phenacetin.

**Means—give such doses.

(d)		Metric	Apoth.
R		Approx.	Equivalents

*Elix. Phenobarb. N. F. 45 cc. ̄ iss

**Elix. Aminopyrin. N. F.
g. s. ad. 90 cc. ̄ iii

Misce.

Sig: ̄ ii in water every 3 or 4 hours as directed.

Note: Analgesic—Sedative

Each dose of ̄ ii contains about:

Phenobarbital—0.016 Gm. or 1/4 gr.

Aminopyrine—0.16 Gm. or 2 1/2 gr.

*Proprietary name for Phenobarbital—Luminal.

**Proprietary name for Aminopyrine—Pyramidon.
Aminopyrine is dangerous for sensitive individuals, especially if given repeatedly.

(f)		Metric	Apoth.
R		Approx.	Equivalents

Acetanilidi 2.1 Gm. gr. XXXV

Caffeinæ 0.3 Gm. gr. V

Sodii Bicarbonatis 0.6 Gm. gr. X

Fiat pulvis No. X

Sig: One powder with half-glass of water.
Repeat in three hours if not relieved.

Note: Analgesic

Each powder contains:

Acetanilid—3 1/2 gr. (0.22 Gm.)

Caffeinæ—1/2 gr. (0.03 Gm.)

Sod. Bicarb.—1 gr. (0.06 Gm.)

Maximum dose acetanilid—8 gr.

Administer with caution—powerful heart depressant.

Quantities should be governed by the treatment indicated.

Contraindicated in pain after surgical operation.

Relief for headache, neuralgic pains.

May be obtained by writing for Pulv. Acetanilidi Compositum—N. F.*

*N. F.—National Formulary, p. 303.

Announcing Program

It is suggested that the following procedure be used to announce the National Dental Program to dentists in your vicinity. This form may serve as a guide for your first letter:

The Hale Prescription Pharmacy
Lowell, Massachusetts
February 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

No doubt you have noticed the addition of prescription formulas to the section of the Council on Dental Therapeutics in the *Journal of the American Dental Association*. This service is being made possible through the cooperation of the Council on Dental Therapeutics of the American Dental Association and the Committee on Dental Pharmacy of the AMERICAN PHARMACEUTICAL ASSOCIATION. The purpose of this service is to present to the dental profession formulas for medication, written in prescription form and calling for convenient quantities of drugs and preparations official in the U. S. P., N. F. or listed in "Accepted Dental Remedies." These prescriptions for medication are for use in the dental office or by the patient.

It is not always convenient to refer to formulas in a journal so we are having the formulas printed on index filing cards so that they may be more readily available for quick reference. As soon as each series of formulas is published you may expect to receive them as a professional service from our prescription department.

We are prepared to discuss your problems on dental medication and would welcome your inquiries. You may expect the first set of prescription formulas in about two weeks.

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Prescription formulas may be printed, typed or stenciled. Index filing cards make suitable materials on which these formulas may be presented for they can be kept in the office file. The second letter to be sent two weeks after the announcement of the prescription service may be patterned after the following:

The Hale Prescription Pharmacy
Lowell, Massachusetts
March 10, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

Medication for the treatment of disease is available to you as well as to the physician. The prescription is a scientific means of ordering medication for the dental patient.

To-day, perhaps more than ever before, patients look for individual treatment of their cases. First, they demand comfort, and if such is not obtained there is always disappointment. Second, they expect correction of any diseased conditions or irregularities in the oral cavity.

Discomfort is a factor which cannot be discounted by the dentist in the treatment of his patients. This condition may be greatly reduced and in some cases entirely eliminated by the proper use of medication. A written prescription for the use of the patient before and after dental treatment may not only increase the patient's comfort but encourage others to avail themselves of your services.

In your highly specialized profession the treatment of pathological conditions requires the use of active standardized therapeutic agents, such as United States Pharmacopoeia and National Formulary medication. Many of these are described in "Accepted Dental Remedies."

It is a pleasure to present you with the first monthly series of prescriptions. You will find each one to be an efficient, well-tried remedy for the treatment of pain.

As a pharmacist, I am familiar with the needs of the dental profession and would consider it a privilege to supply you and your patients with a professional pharmaceutical service.

You are cordially invited to make use of the resources of our Prescription Department.

Please telephone me if you have any questions to ask about the medication. Humboldt 3-5072

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Dental Centenary Celebration

The preliminary program has been announced for this occasion which commemorates the founding one hundred years ago of the first dental school in the world, the Baltimore College of Dental Surgery, now the Dental School of the University of Maryland, and the completion of the first century of the profession of dentistry. During this period, dentistry has achieved a

remarkable development and has made a very important place for itself as a public health profession. Its contributions to the health and comfort of the people have been extensive and valuable and should be a source of pride and satisfaction to the members of the profession. American pharmacy joins heartily with its sister profession in this happy celebration and extends best wishes for continued success in the future.

The celebration will be held in Baltimore, Md., on March 18-20, 1940. General Sessions will be held in the forenoon of each day and Scientific Session in the afternoon, the latter consisting of sectional meetings. The First General Session will be devoted to addresses of welcome and to an address by President William M. Lewis of Lafayette College; the Second Session to greetings from the American Medical Association, AMERICAN PHARMACEUTICAL ASSOCIATION and the American Public Health Association and an address by Surgeon General Thomas Parran, Jr., of the U. S. Public Health Service; the Third Session to an Academic Convocation at which President Raymond A. Kent of the University of Louisville will speak on "The Relation of Dental Education to the University Program." President DuMez will represent the A. Ph. A. at the celebration.

A program of Visual Education will be carried on for the three days and a Section of Historical Exhibits.

A Simple and Accurate System of Naming Colors

Another Contribution to Science by Pharmacy

For years, sciences and industries have been handicapped by two difficulties in connection with colors. First, to reproduce colors and, second, to accurately name them.

Color is of increasing importance in Pharmacy. The identity and purity of drugs and medicines are in many instances indicated by color. Many reactions are indicated by color changes. For some time

the revisers of the U. S. P. and N. F. have recognized that the color names in general use such as yellowish, purplish brown, blackish white, and so on were inaccurate. At the U. S. P. Convention in 1930, an extensive exhibit was designed to emphasize this problem. It was so impressive that an invitation was issued by the U. S. P. Convention to a number of interested groups to consider the proposal to form an organization for the intensive study of problems involving color. This led to the formation of the Inter-Society Color Council of which Dr. E. N. Gathercoal, Chairman of the Committee on National Formulary, was the first Chairman.

It was recognized that the first requirement was an accurate system of color naming. The Bureau of Standards agreed to provide the apparatus and direction for this study provided the worker and the supplies were secured. The AMERICAN PHARMACEUTICAL ASSOCIATION met this requirement in 1936 through a grant which provided as Research Associate, Kenneth L. Kelly, and the materials required. Later, the U. S. P. contributed toward this grant. Dr. Deane B. Judd of the Colorimetry Section of the Bureau of Standards has directed the work.

Recently, the Inter-Society Color Council announced publication of the first report on this project, "Method of Designating Colors," as Research Paper No. 1239, by the Bureau of Standards. Copies may be obtained from the Superintendent of Documents, Washington, D. C., price 10 cents.

"The problem dealt with in this report caused the formation of the Inter-Society Color Council, and was presented to the Council by the U. S. Pharmacopoeial Revision Committee at the first meeting. As originally stated, the problem was 'to find a means of designating colors in the U. S. Pharmacopoeia, the National Formulary, and pharmaceutical literature;' such designation to be sufficiently broad to be appreciated and usable by science, art, and industry, and sufficiently commonplace to be understood at least in a general way by the whole public."

Color Names for Drugs and Chemicals

"Committees of the Council have been working on a solution for the past seven years. Mr. Kenneth L. Kelly, research associate for the AMERICAN PHARMACEUTICAL ASSOCIATION, has given his full time to details of the solution during the past three years, working at the National Bureau of Standards

under the immediate direction of Dr. Deane B. Judd. In June of 1939 the solution reported by Messrs. Judd and Kelly was accepted by letter ballot of the voting delegates of the Inter-Society Color Council. The method is therefore recommended by the Council for designating the colors of drugs and chemicals, and is tentatively suggested for general use. Final action on recommendation for general use will come after Council committees have had an opportunity to study the application of this color-naming method to specific fields of color work covered by the interests of member bodies. It is hoped that members of each society will cooperate in studying the general application of this method, in order to provide a standardized and widely accepted method of designating colors. Any comments will be appreciated. They should be forwarded to Deane B. Judd, National Bureau of Standards, Washington, D. C."

There is also available, upon request, from the AMERICAN PHARMACEUTICAL ASSOCIATION, 2215 Constitution Ave., Washington, D. C., the complete set of Instructions for Determining the Color Names of Drugs and Pharmaceuticals which gives directions covering crude drugs, powdered drugs and chemicals, microscopic structures, liquids including oils and chemical reactions.

The annual meeting of the Inter-Society Color Council will be held at the Hotel Roosevelt, New York City, on February 21 and 22, 1940. The proposed system of color names will be an important topic and representatives of science and industry will be requested to determine if the system is applicable in their fields for report at the 1941 meeting. The indications are that this system will later be in general use.

Committee on Medical Care— Maryland State Planning Commission

Recently the Medical and Chirurgical Faculty, which is the medical society of Maryland, requested the Maryland State Planning Commission to organize a Committee on Medical Care consisting of representatives of the Lay Public and of the following organizations.

Baltimore City Medical Society, Maryland Academy of Medicine and Surgery, Maryland State Grange, Maryland Dental Association, Maryland Medical, Dental and Pharmaceutical Association,

School of Medicine of The Johns Hopkins University, Associated Hospital Service of Baltimore, Inc., Medical and Chirurgical Faculty of Maryland, School of Hygiene and Public Health of The Johns Hopkins University, Maryland State Planning Commission, Maryland Conference of Social Welfare, Maryland State Nurses Association, Maryland and District of Columbia Industrial Union Council, Maryland Pharmaceutical Association, Maryland Congress of Parents and Teachers, the lay public, Maryland State and District of Columbia Federation of Labor, State Department of Public Welfare, State Board of Mental Hygiene, State Department of Health, Institute of the History of Medicine of The Johns Hopkins University, Baltimore Hospital Conference, Maryland Federation of Women's Clubs, Mental Hygiene Society of Maryland, Baltimore City Department of Public Welfare, Maryland Farm Bureau, Inc., Baltimore City Health Department, and the Maryland Tuberculosis Association.

With the approval of Governor O'Connor this committee was appointed and held its first meeting on January 23, 1940. In opening the meeting Dr. Abel Wolman, chairman of the Commission, welcomed the members, assured them of the interest and coöperation of the Commission and presented the following

General Statement of Objectives and Assignment

The primary function of this committee should be to keep under constant survey the problems of medical care and hospitalization in Maryland and to formulate from time to time recommendations for better utilization or expansion of medical and hospital facilities.

The term "medical care" is here used in the broad sense of including all facilities for safeguarding and improving the health of the people. As such, it involves lay and professional medical education, sanitation, preventive and curative medicine, dental and nursing care, pharmacy and hospitalization.

Although Maryland is fortunate in her wealth of medical facilities and the general high level of medical care which her citizens receive, important deficiencies may be noted, as follows:

1. The lack of facilities for hospital care for negro patients in the counties.

2. The lack of adequate support for the outpatient departments of city and county hospitals.

3. The lack of funds or organization for the medical care in their homes of those upon relief, of other classes of indigent or medically indigent patients, and for individuals in the lower brackets annual income.

4. The lack of facilities for postgraduate education for practicing physicians.

5. The inadequate buildings, equipment at budget of certain county hospitals.

6. The lack of beds in the counties for the care of chronically disabled patients.

7. The lack of adequate accommodations for existing institutions for the feeble-minded, especially among the colored race.

Some of these needs and others are well known to each member of the committee as are also many efforts to obtain corresponding improvements. However, there has never before existed an official warrant for any group to evolve a coöordinated program in which all medical care and hospital agencies would take a part. This committee has been designed as such a group and the warrant is herewith presented.

The existing system of medical and hospital care is composed of many interrelated elements. It derives its support from the fees of private patients, from the philanthropic contributions of the general public to medical institutions, from the philanthropic donations of service by the medical profession and from tax funds devoted to public health and to the support of medical institutions. There is general agreement that an increase of the financial support derived from tax funds is a requisite to adequate development of medical care. It is vital, however, that the program for such state supported improvements in our present system of medical and hospital care be devised so as to conserve all of the valuable assets we now possess and be planned in a manner which would not set one form of medical service in competition with another to mutual disadvantage.

The committee should be constantly comparing existing and prospective needs with available medical and hospital facilities and on the basis thereof plan systematically to improve or modify the present system in the best possible manner.

The committee is requested, therefore, by the State Planning Commission to canvass the existing disabilities, if any, in our present private and public facilities for hospitalization and medical care. If such disabilities exist, their amount, character and quality should be evaluated and presented in some detail for public discussion and information.

When such disabilities have been adequately diagnosed, it is hoped that the committee will be prepared to suggest the necessary corrective measures which might be introduced into the public and private operations of the state of Maryland in order to adjust our facilities to an improved service to the public.

Thirdly, the Commission will look to the committee to indicate what costs would be involved in the development of such a program of correction and to indicate at what rate such changes might be introduced and what sources of funds might best be used for such purposes.

It is realized, of course, that such a large assignment cannot be consummated within a short period of time, but the State Planning Commission requests that a reasonably complete report be made available no later than October 1, 1940, so that at least the preliminary elements of the study would be on hand prior to the convening of the Maryland Legislative Assembly in January 1941.

Later Dr. Maurice C. Pincoffs was elected chairman of the committee, and an Executive Committee was appointed to draft a program and submit a budget as soon as possible. The committee will then proceed with its work.

American Scientific Congress

The Department of State has announced that the Eighth American Scientific Congress will be held in Washington, D. C., from May 10 to 18, 1940, under the auspices of the Government of the United States of America.

Pursuant to a special act of the Congress of the United States invitations on behalf of the President have been extended to the Governments of the American Republics members of the Pan-American Union to participate in the forthcoming meeting. Scientific institutions and organizations including

the A. PH. A., have been invited to send representatives.

This series of inter-American meetings, serving as a medium for the exchange of scientific information of particular interest and importance to the governments and peoples of the Americas has enjoyed a long and distinguished history dating from the first Latin American Scientific Congress held at Buenos Aires in April 1898.

The Congress will be divided into the following sections, each to be in charge of a chairman assisted by a vice-chairman, secretary and section committee:

- I. Anthropological Sciences.
- II. Biological Sciences.
- III. Geological Sciences.
- IV. Agriculture and Conservation.
- V. Public Health and Medicine.
- VI. Physical and Chemical Sciences.
- VII. Statistics.
- VIII. History and Geography.
- IX. International Law, Public Law and Jurisprudence.
- X. Economics and Sociology.
- XI. Education.

The chairmen of the respective sections will be selected at an early date, after which the detailed agenda of each section will be announced.

American Social Hygiene Association Annual Meeting

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This Conference was very well attended and developed additional interest in the program for the control of venereal diseases. President A. G. DuMez of the A. PH. A. delivered the following address at the third session of the Conference:

Standards and Ethics of the Pharmaceutical Profession—How Can the Cooperation of the Pharmacist Be Obtained?

Ethics in the sense in which it is used in

School of Medicine of The Johns Hopkins University, Associated Hospital Service of Baltimore, Inc., Medical and Chirurgical Faculty of Maryland, School of Hygiene and Public Health of The Johns Hopkins University, Maryland State Planning Commission, Maryland Conference of Social Welfare, Maryland State Nurses Association, Maryland and District of Columbia Industrial Union Council, Maryland Pharmaceutical Association, Maryland Congress of Parents and Teachers, the lay public, Maryland State and District of Columbia Federation of Labor, State Department of Public Welfare, State Board of Mental Hygiene, State Department of Health, Institute of the History of Medicine of The Johns Hopkins University, Baltimore Hospital Conference, Maryland Federation of Women's Clubs, Mental Hygiene Society of Maryland, Baltimore City Department of Public Welfare, Maryland Farm Bureau, Inc., Baltimore City Health Department, and the Maryland Tuberculosis Association.

With the approval of Governor O'Connor this committee was appointed and held its first meeting on January 23, 1940. In opening the meeting Dr. Abel Wolman, chairman of the Commission, welcomed the members, assured them of the interest and coöperation of the Commission and presented the following

General Statement of Objectives and Assignment

The primary function of this committee should be to keep under constant survey the problems of medical care and hospitalization in Maryland and to formulate from time to time recommendations for better utilization or expansion of medical and hospital facilities.

The term "medical care" is here used in the broad sense of including all facilities for safeguarding and improving the health of the people. As such, it involves lay and professional medical education, sanitation, preventive and curative medicine, dental and nursing care, pharmacy and hospitalization.

Although Maryland is fortunate in her wealth of medical facilities and the general high level of medical care which her citizens receive, important deficiencies may be noted, as follows:

1. The lack of facilities for hospital care for negro patients in the counties.

2. The lack of adequate support for the outpatient departments of city and county hospitals.

3. The lack of funds or organization for the medical care in their homes of those upon relief, for other classes of indigent or medically indigent patients, and for individuals in the lower brackets of annual income.

4. The lack of facilities for postgraduate education for practicing physicians.

5. The inadequate buildings, equipment and budget of certain county hospitals.

6. The lack of beds in the counties for the care of chronically disabled patients.

7. The lack of adequate accommodations for existing institutions for the feeble-minded, especially among the colored race.

Some of these needs and others are well known to each member of the committee as are also many efforts to obtain corresponding improvements. However, there has never before existed an official warrant for any group to evolve a coördinated program in which all medical care and hospital agencies would take a part. This committee has been designed as such a group and the warrant is herewith presented.

The existing system of medical and hospital care is composed of many interrelated elements. It derives its support from the fees of private patients, from the philanthropic contributions of the general public to medical institutions, from the philanthropic donations of service by the medical profession and from tax funds devoted to public health and to the support of medical institutions. There is general agreement that an increase of the financial support derived from tax funds is a requisite to adequate development of medical care. It is vital, however, that the program for such state supported improvements in our present system of medical and hospital care be devised so as to conserve all of the valuable assets we now possess and be planned in a manner which would not set one form of medical service in competition with another to mutual disadvantage.

The committee should be constantly comparing existing and prospective needs with available medical and hospital facilities and on the basis thereof plan systematically to improve or modify the present system in the best possible manner.

The committee is requested, therefore, by the State Planning Commission to canvass the existing disabilities, if any, in our present private and public facilities for hospitalization and medical care. If such disabilities exist, their amount, character and quality should be evaluated and presented in some detail for public discussion and information.

When such disabilities have been adequately diagnosed, it is hoped that the committee will be prepared to suggest the necessary corrective measures which might be introduced into the public and private operations of the state of Maryland in order to adjust our facilities to an improved service to the public.

Thirdly, the Commission will look to the committee to indicate what costs would be involved in the development of such a program of correction and to indicate at what rate such changes might be introduced and what sources of funds might best be used for such purposes.

It is realized, of course, that such a large assignment cannot be consummated within a short period of time, but the State Planning Commission requests that a reasonably complete report be made available no later than October 1, 1940, so that at least the preliminary elements of the study would be on hand prior to the convening of the Maryland Legislative Assembly in January 1941.

Later Dr. Maurice C. Pincoffs was elected chairman of the committee, and an Executive Committee was appointed to draft a program and submit a budget as soon as possible. The committee will then proceed with its work.

American Scientific Congress

The Department of State has announced that the Eighth American Scientific Congress will be held in Washington, D. C., from May 10 to 18, 1940, under the auspices of the Government of the United States of America.

Pursuant to a special act of the Congress of the United States invitations on behalf of the President have been extended to the Governments of the American Republics members of the Pan-American Union to participate in the forthcoming meeting. Scientific institutions and organizations including

the A. PH. A., have been invited to send representatives.

This series of inter-American meetings, serving as a medium for the exchange of scientific information of particular interest and importance to the governments and peoples of the Americas has enjoyed a long and distinguished history dating from the first Latin American Scientific Congress held at Buenos Aires in April 1898.

The Congress will be divided into the following sections, each to be in charge of a chairman assisted by a vice-chairman, secretary and section committee:

- I. Anthropological Sciences.
- II. Biological Sciences.
- III. Geological Sciences.
- IV. Agriculture and Conservation.
- V. Public Health and Medicine.
- VI. Physical and Chemical Sciences.
- VII. Statistics.
- VIII. History and Geography.
- IX. International Law, Public Law and Jurisprudence.
- X. Economics and Sociology.
- XI. Education.

The chairmen of the respective sections will be selected at an early date, after which the detailed agenda of each section will be announced.

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Ethics in the sense in which it is used in

this paper has been defined as: "a system of moral principles; as social ethics, medical ethics and professional ethics." The lexicographer might have added by way of further explanation pharmaceutical ethics, because the relationship of the pharmacist to his patrons is much the same in some respects as that of the physician to his patients.

The desirability of providing a system of moral principles to guide the physician in his practice was recognized by the ancients and the wisdom thereof has been proven in the time which has intervened. This is likewise true with respect to the pharmacist. The AMERICAN PHARMACEUTICAL ASSOCIATION, in recognition of the proven value of some system of this kind for the guidance of pharmacists in dealing with their patrons and in their relations with the members of the other health professions, adopted a code of ethics shortly after its organization in 1852, which was revised in 1922, and from which I quote the following paragraphs:

"Pharmacy has for its primary object the service which it can render to the public in safeguarding the handling, sale, compounding and dispensing of medicinal substances."

"The pharmacist should hold the health and safety of his patrons to be of first consideration; he should make no attempt to diagnose or treat diseases or strive to sell drugs or remedies of any kind simply for the sake of profit."

"The pharmacist should be willing to join any constructive effort to promote the public welfare and he should regulate his public and private conduct and deeds so as to entitle him to the respect and confidence of the community in which he practices."

These three excerpts have been selected for quotation because they set forth with brevity and clarity the position of the AMERICAN PHARMACEUTICAL ASSOCIATION with regard to the diagnosis and treatment of disease by pharmacists, to the sale of drugs and medicines simply for the sake of profit, and with regard to the coöperation of pharmacists with other groups which have as their objectives the promotion of the public health and welfare, principles which considerable numbers of pharmacists have been accused of violating in a recent publication issued by the United States Public Health Service.

I hold no brief for the unethical pharmacist or is it my purpose to attempt to excuse the wilful violation of any of the foregoing principles, but I cannot in fairness to those whom I represent, refrain from calling to your attention the fact that pharmacists as a whole are not dishonorable or are they unmindful of their responsibilities with respect to safeguarding the health of our citizens and, in view of past performance, they cannot be characterized as non-co-operative.

To be sure, there are derelicts among pharmacists, even as there are among physicians and dentists and lawyers, but the facts are, as you well know, that pharmacists in general enjoy the respect and confidence of the communities in which they reside, and this would not be true if they were given to indulging in unethical practice. Legally and morally, their responsibilities in this regard are as great as those of the physician notwithstanding the fact that economic necessity and public demand generally compel them to conduct commercial emporiums in conjunction with the practice of their profession.

Contributions to Public Health

That pharmacists as a whole are aware of their responsibilities with respect to safeguarding the health of our people may not be so well known to some of you, but I assert that it is a fact equally as well established as their standing in the community and that they have many noteworthy accomplishments to their credit in this phase of public health activity. As evidence in support of this assertion, I call your attention to the fact that two of our most widely used books of official drug standards, *The United States Pharmacopæia* and *The National Formulary*, are elaborated largely by pharmacists, the latter almost wholly; and that all of our state laws, with few exceptions, governing the practice of Pharmacy, and the manufacture, sale and distribution of drugs and medicines were placed on the statute books of the respective states through the enactment of legislation initiated and fostered mainly by pharmacists. Like-

wise, pharmacists are responsible in no small measure for the federal laws which have been enacted to control the importation, manufacture, sale and distribution of drugs and medicines. The first objective of the AMERICAN PHARMACEUTICAL ASSOCIATION as set forth in its constitution reads as follows: "To improve and regulate the drug market by preventing the importation of inferior, adulterated, or deteriorated drugs and by detecting and exposing home adulterations;" and mind you, this was written in 1852, long before the enactment of any federal or state laws to control the purity and quality of these products. In this connection, I will also add that drug addiction, so prevalent in this country a few decades ago, is no longer a serious menace to the public health and welfare largely because of the strict compliance on the part of pharmacists with the laws governing the sale and distribution of narcotics. Among the more than 50,000 pharmacists in the United States licensed to sell narcotics, the violations reported annually are so small as to be almost negligible in number—about 2 per cent, and these are mostly technical in character.

As evidence that pharmacists have been favorably disposed in the past to cooperate with other organized groups in their endeavors to safeguard the health of the public, I call your attention to the part taken by them in making effective the campaigns to remove from the market such preparations as the habit-forming cough syrups, catarrh snuffs and asthma cures and the nostrums advertised for the cure of cancer, consumption, et cetera. As proof of their willingness to cooperate with these groups in the future, I quote the following resolution adopted by the AMERICAN PHARMACEUTICAL ASSOCIATION at the Convention held in 1938:

"Resolved: 1. That the AMERICAN PHARMACEUTICAL ASSOCIATION expresses its profound interest in all plans proposed for extending medical care,

2. That the ASSOCIATION pledges its cooperation in devising suitable plans for the utilization of existing agencies now providing medical services and,

3. That the ASSOCIATION strongly urges the retention of free choice of physician, dentist, phar-

macist and nurse, by the patient, as an essential feature is whatever system may be adopted."

Reasons Why Pharmacists Have Not Coöperated

In view of the favorable attitude exhibited by pharmacists toward the provision of standards for drugs and medicines and the enactment and enforcement of laws for controlling their manufacture, sale and distribution and in view of past performance with respect to coöperation in movements for the promotion of public health and welfare, it would appear that there must be some good reason or reasons for the failure of considerable numbers of them in widely separated sections of the country to coöperate fully with the groups represented here in carrying out the program for the control of venereal diseases, and it is my opinion that the following are the more important of these reasons:

1. Failure to recognize in the beginning the importance of organized pharmacy in the development and furtherance of the program for the control of venereal diseases and to formally invite its coöperation.

Unless I am misinformed, this is the first time that organized pharmacy has been invited by any of the groups represented here to coöperate in making effective the program for the control of venereal diseases. The blame for the failure of pharmacists to coöperate in the furtherance of this program as fully as you anticipated, therefore, does not rest entirely with us. To me, it seems quite obvious that no professional society can be expected to cope successfully with an extraneous problem of this kind within its own ranks when such professional society and the profession which it represents are not made a party to the organized efforts for the solution of that problem. Had the organizations represented here invited the AMERICAN PHARMACEUTICAL ASSOCIATION to coöperate in making effective this program in the early stages of its development, I have good reason to believe that the invitation would have been accepted and that you would have had by this time not only the coöperation of the AMERICAN PHARMACEUTICAL ASSOCIATION but that of all the other pharmaceuti-

cal organizations, national, state and local, which look to it for leadership in matters pertaining to the public health and welfare. As it is, we must now begin from scratch whereas you have a five-year start on us.

2. Lack of effective measures designed primarily to fully educate pharmacists with regard to the nature and purpose of this program and its importance from a public health standpoint.

Pharmacists, as a whole, are no doubt not as well informed as physicians with respect to public health problems and their importance by virtue of the difference in their education and training, and this is particularly true of the older pharmacists, who attended college before courses in the biological sciences, public health, sanitation, et cetera, were a part of the pharmaceutical curriculum. Special educational and informative measures should, therefore, be developed to acquaint them more fully with these problems and particularly with reference to this program.

3. Failure to make full use of the drug store as an agency for the dissemination to the public of information on venereal diseases.

In the report of a functional study of pharmacy made under the direction of Dr. W. W. Charters, then Dean of the Graduate School of the University of Pittsburgh, and published in 1927, there appear the following statements:

"The pharmacists are more strategically situated than any other group of individuals to give personal advice upon matters of public health on which they are informed. The information is given free of charge and can be obtained within easy walking distance of the home."

"A well-informed pharmacist is the best single individual to disseminate information about public health."

If these statements represent the considered opinion of an experienced investigator, who has made a study of the services which pharmacists are prepared to render, why not profit by them? Supply the pharmacists with the information and literature which you desire to have disseminated, and, if you will pardon me for the suggestion, make

these supplies available through the pharmaceutical organizations, which I believe you will discover to be your most effective means of distribution.

4. Failure to appreciate the difficulties faced by pharmacists in their efforts to cooperate fully in carrying out their part of the program.

My opinion in this instance is based on the fact that a large majority of those who contract a venereal disease apply to the drug store first for a remedy and, if I am correctly informed, they usually call for a specific item, one of the several packaged remedies. It is often embarrassing and frequently difficult for a pharmacist to refuse to sell to a patron of long standing an item when called for over the counter, particularly when the item, up to the present time at least, has been lawfully made and distributed, where there are no legal restrictions against its sale by the pharmacist and when the pharmacist knows that it can be purchased in stores other than those conducted by pharmacists. Then too, it is not always as easy as it may seem to persuade a patron to consult a physician. There are those who boldly state that they know what they want and that they do not need or desire treatment by a physician. These patrons are not greatly impressed with the statement that the sale of these remedies is unethical or with the proffered advice that it is not only desirable but imperative that they consult a physician if suffering and lingering illness are to be avoided. If some effective means for refusing to sell these remedies could be worked out whereby the pharmacist would be relieved of the embarrassment of offending his patrons, I am confident that pharmacists would welcome it.

5. Failure to devise a satisfactory routine for referring venereal disease cases to physicians and clinics.

It has been reported that patients referred to clinics by pharmacists frequently return to them with the complaint that the treatment received was unsatisfactory and with the urgent request that they be supplied with a remedy of their own choice. It is realized that complete satisfaction in all of

these cases is impossible to attain, but it does seem that some more effective routine for handling these cases could be devised.

Recommendations for Closer Coöperation

Pharmacy has not failed in any of its previous undertakings and I am certain that it will not fail to do its share in this instance if properly approached and fully informed of your aims and its responsibilities. By way of conclusion and for the purpose of definitely pointing the way to secure the full coöperation of Pharmacy in the furtherance of this program, I therefore offer the following recommendations:

1. That there be established closer coöperation between public health officials, physicians and pharmacists. This can be effected by inviting pharmacists to take part in meetings of this kind, national, state and local, and by giving them representation in so far as this is possible on boards and committees created for the purpose of directing or controlling public health programs in which pharmacists are expected to coöperate.

2. That special measures be developed to fully educate pharmacists with regard to the nature and purpose of the venereal disease control program or, if this is not feasible, that there be sent to them the same information on the development and progress of this program as is sent to physicians.

3. That pharmacists be supplied with display material which can be exhibited in their pharmacies and with literature for distribution to the lay public.

4. That there be devised in coöperation with pharmacists an effective means to enable them to refuse to sell remedies for the treatment of venereal diseases without offending their patrons.

5. That there be developed in coöperation with pharmacists an effective routine for referring venereal disease cases to physicians and clinics whereby those thus referred will be assured of receiving adequate treatment.

One of the Sectional Meetings held on Friday, the 2nd, was devoted to a consideration of "Pharmacy and Medical Practice Laws and Their Enforcement."

President E. O. Holland, the Board of Regents, and the Graduate School of the State College of Washington take pleasure in announcing that the School of Pharmacy now offers courses leading to the degree of Doctor of Philosophy.

Practical Pharmacy and Dispensing*

By C. L. Guthrie†

A system of recording prescriptions that has been used for many years and found most satisfactory. It gives, at a glance and in an accurate and permanent way, just the information that every prescription pharmacist should have available.

This system requires only two items of special equipment: a 500-page blank book size 8½ by 13¾, ruled 52 lines to the page, and a triplicate numbering machine. The book can be secured from any stationer at a cost of approximately \$2.00 and will record about 25,000 prescriptions. The triplicate numbering machine will cost about \$16.00 and, with proper care, will last many years.

Each page is to be divided by perpendicular lines into seven columns. The first one should be 1¼ inches wide, the second 1¼ inch and the remaining five about 1¼ inches each. The first column records the date; the second, the person dispensing the prescription; the third, the prescription number; the fourth, the name of the patient; the fifth, the name of the prescriber; the sixth, the nature of the medication (pills, powders, ointment, capsules, etc.), and the seventh, the value, or cost to the patient.

After the prescription has been compounded, the label is typewritten and the numbering machine in triplicate imprints one number on the prescription, one on the label and the other on the record book and the dispenser writes in the information as called for by the several column headings. In the case of refills, the dispenser, in his own hand, makes all the entries. Narcotic prescription labels are typed and recorded in red ink and the kind and quantity of the narcotic ingredient are indicated in the date column. After the prescription has been delivered, the dispenser indicates in the value column whether "paid" or "charged."

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

South Ave., Petersburg, Va.

At the close of the day, the total of the new prescriptions (numbered by the machine) and the refills (written in by hand) and their value, are added to their corresponding totals thus far determined for the month. An additional summation is en-

record for the last day of each month show the total number of new and refill prescriptions, separately indicated, together with their total value. When the record for the twelfth month is completed, the next page in the book is reserved for a combined sum-

Friday, AUG 18, 1939	Dis- pense ^y .	Number	Name of Pa- tient.	Name of Pre- scriber.	Nature of Pre- scription	Value
	A	289860	Baby Smith	White	6 powds	fd 35
	A	289861	Jack Brown	Robbins	4 oz mixt	c 75
	B	289862	June Truham	McCluskey	12 Caps	fd 50
	D	288672	Mrs. Gooder	Nixon	54 Caps	fd 275
4 Gs. Codeine	A	289863	" Jackson	Williams	4 oz mixt	fd 85
	E	289864	W. H. Clark	Snodgrass	1 oz Diet	fd 50
	A	289865	W. R. Ricketts	Bright	24 Pills	c 60
	B	289866	Sam Brown	Schmidt	3 oz mixt	fd 65
	E	279640	A. Selman	Early	6 Suppos.	fd 50
1/2 G. Selenin	A	289867	L. F. Harris	Darwin	4 oz mixt	c 90
18 Gs. Dovers po.	B	289868	W. H. Howell	Hill	12 Caps	fd 50
	D	289869	E. Crump	Osborne	2 oz Diet	c 85
	B	289870	W. E. Adams	Smith	4 oz mixt	fd 75
	E	289871	A. Carey	Johnson	12 powds	c 60
	B	198685	J. Taylor	Clark	2 oz mixt	fd 65
	E	270875	W. H. Galt	Youngkins	1 powder	fd 75
	A	289872	B. G. Boggs	Taylor	12 oz mixt	fd 1.50
4 Gs. Morph	A	289873	S. Zimons	L. Hugh	20 Tabs	fd 75
	E	289874	F. H. Baird	Barker	3 oz Diet	fd 100
	D	289875	F. B. Bruce	Mason	26 powds.	c 85
	A	289876	W. H. Stuart	Johnson	30 Caps	fd 100
	E	186970	L. Sines	Holmes	4 oz mixt	fd 75
	A	289877	F. Matley	Rebill	12 sup-	fd 1.25
6 Gs. Codeine	A	289878	A. L. Parker	Perkins	6 oz mixt	c 1.00
4 Gs. Cocaine	A	289879	Mrs. Murray	Williams	Eys. Suppos	fd 60
	E	289880	Geo. Owens	Edmonds	6 oz mixt	fd 90
	A	289881	W. H. Selley	Ray	12 Caps	fd 50
5 R = 3/10		3 Gs. Morphine				\$ 22.50
22 St. 9/10		10 " Codeine		6		672.00
4 " to next day		12 " Selenin		=	Food to next day	\$ 694.50
		4 " Cocaine				
		18 " Dovers pos.				

tered for the narcotic prescriptions which shows the kind and quantity of each narcotic used and the total number of narcotic prescriptions filled during the day. The

mation of each monthly total for the year. This yearly record shows the total number of new and old prescriptions filled, the value of each, as well as their total value. It is, then,

but a simple division to determine the average cost per prescription, or the percentage relation the narcotics or refills bear to the total number dispensed. As the books are filled, they are consecutively numbered on the back margin and each margin also shows the number and date of the first and the last prescription therein recorded.

Some time is required for making the entries and some expense is incurred in purchasing the necessary equipment, but experience in keeping such a record for more than thirty years has abundantly proved that the advantages far outweigh the objections. Almost daily, this record is found especially valuable. For instance, a request was recently received to refill a lost prescription that was originally filled in 1917. After a few questions as to the name of prescriber and patient and the nature of the medicine, the book for that year was consulted. In a very short time, the prescription was located and furnished, much to the satisfaction of the inquirer, who commented very favorably upon this system of keeping prescription records.

Additional Coal-Tar Colors to Be Considered at Hearing

The Food and Drug Administration announced February 6th that a public hearing will be held March 11th to receive evidence upon a proposal to add two new coal-tar colors—D and C Green No. 8 and D and C Red No. 39—to the list acceptable for certification under the Federal Food, Drug and Cosmetic Act. The hearing will open at 10 A.M. in Room 1039, South Building, Department of Agriculture, Washington, D. C.

The hearing is open to all interested persons. In lieu of personal attendance, affidavits may be mailed, so as to be received not later than March 11, 1940, to the presiding officer, Mr. Frank S. Hassell, Room 2313A, South Building, Department of Agriculture. Officials said that lack of opportunity for cross examination will be taken into account in the consideration of such affidavits.

Insecticides in the Drug Store*

By Maynard W. Quimby†

The term insecticide is applied to any type of material or preparation used for the purpose of killing insects and related organisms.

The study of insecticides is a very broad one, and its many phases deal with Botany, Chemistry, Agriculture, Entomology and other branches of science. In a rather short article it would be impossible for one to do more than briefly outline this very broad subject. Therefore, only a brief consideration of insecticides will be made here.

There would seem to be a fine opportunity for the pharmacists to handle more of these insecticidal products than is the usual practice. With his training in Biology and Chemistry the pharmacist is certainly well qualified to advise customers concerning the use of substances employed in controlling insect pests of the household and garden. In rural districts there is also an opportunity for the retail pharmacist to handle the materials used in controlling insects and fungus diseases of agricultural crops.

It has recently been estimated that insects cause a yearly loss of two billion dollars in the United States, and that a hundred million dollars are spent each year for insecticides and fungicides. Why shouldn't the pharmacist cooperate in controlling these pests?

Methods of control are governed to a considerable extent by the type of insect concerned. Beetles and other insect pests with chewing mouth parts are usually readily destroyed by the use of materials which act after being taken into the alimentary tract and which are referred to as stomach poisons. Insects with sucking and piercing mouth parts obviously cannot be controlled by such materials. Pests of this sort, which include the aphids, mosquitoes, etc., are effectively combatted by the use of contact poisons which act by corroding the body, by clogging the spiracles or in some other way

* Presented before the Section on Pharmaceutical Economics, A. PH. A., Atlanta meeting, 1939.

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destroying these organisms. Fumigants are valuable agents especially in greenhouses and other enclosed areas.

Some of the most effective and widely used insecticides are of plant origin. Rotenone and rotenone-yielding plants are constantly increasing in importance. The value of pyrethrum has long been recognized, and nicotine, with its compounds, deserves a place among the important insecticidal materials.

Rotenone is yielded by numerous species of leguminous plants representing a number of genera. Some of these plants have been used as "fish poisons" in the tropics for a long time. "Tuba root" is yielded by *Derris elliptica* (Roxb.) Benth and other species of *Derris*. These plants are woody climbers native to Malaya and the East Indies. "Cubé," or "Cubé root," consists of the underground parts of certain species of South American vines belonging to the genus *Loucheocarpus*. *Tephrosia virginiana* Pers., commonly known as "devil's shoestring," is a weed which grows rather commonly in parts of the United States. This plant is now known to yield rotenone and experimental work is being carried on in an attempt to obtain strains which are high in rotenone content.

Rotenone acts both as a powerful stomach poison and as a contact insecticide. According to recent reports from the Department of Commerce over three million pounds of rotenone-bearing roots were imported into the United States in 1938.

Tremendous quantities of pyrethrum are imported annually. In 1937 about twenty million pounds of "insect flowers" were brought in, most of the supply coming from Japan. This insecticide is employed in various ways. Powdered flower heads, oil extractions of various types and concentrated extracts are used. In some cases insect flower preparations are mixed with other poisons such as derris or rotenone. Just how pyrethrum acts is not entirely understood, but it is effective against both chewing and sucking insects.

The value of nicotine and its compounds is widely recognized in controlling insects both in the greenhouse and garden.

These are only a few of the more important insecticides obtained from plants. Roark states that "insecticides of the future will be mostly organic compounds obtained from plants now regarded as worthless weeds or synthesized from products of plant origin."

In addition there is an almost endless number of so-called chemical insecticides many of which have a place in a drug store, including such well-known compounds as Paris green, calcium arsenate, and other arsenic salts, sodium fluoride, sodium fluosilicate, various cyanides, sulfur, carbon disulfide, carbon tetrachloride and paradichlorobenzene.

Many effective insecticide preparations have rather simple formulas and can be readily prepared by the retail pharmacist. A mixture of powdered pyrethrum 20%, powdered cubé 30%, powdered sulfur 25% and a sufficient amount of some inert ingredient makes a very efficient flea powder. A dusting mixture containing about 1% rotenone, 25% sulfur and 74% of some inert material makes a rather effective preparation for the control of insects and certain fungus diseases in the flower or vegetable garden. Paradichlorobenzene can be bought at a very reasonable price in hundred-pound lots, and by so doing the retail pharmacist could well compete with the department store and mail-order house in the selling of this material.

There is an abundance of available information concerning insecticidal substances and insect pests in the publications of various state agricultural experiment stations. Examples which might be mentioned are Bulletin 356 of the Missouri Agricultural Experiment Station entitled, "Insect Pests of the Household," the Cornell extension Bulletin 202 on "Common Insects of the Household," and publications of the United States Department of Agriculture, all of which may be obtained for a small charge. One may refer to textbooks, other reference books and various scientific journals for additional advice and information.

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Syrup of Wild Cherry in Prescriptions*

By C. C. Reed†, P. L. Burrin† and F. E. Bibbins†

It has been the authors' privilege to see many prescriptions during the last few years which, when compounded, had caused the pharmacist to question either their compatibility or appearance. When any large group of such prescriptions is tabulated according to their ingredients, certain products will be found to constitute a large proportion of these. Those products used as vehicles will appear most often. Since the number of vehicles used is relatively few, any vehicle requiring special attention when used in compounding necessarily will be in for the most criticism and questioning.

Syrup Wild Cherry U. S. P. XI is one of the items which is used extensively as a vehicle. It is prescribed very frequently in combination with alkaloidal salts. Their potency, as well as their complex chemical nature, make these alkaloidal salts the main consideration for compatibility when dispensing them in a prescribed combination. The prescribing of large numbers of such questionable combinations led the authors to undertake a study of the product Syrup Wild Cherry to see if a more universally adaptable formula could not be developed for its manufacture.

The formula for making this syrup has been changed several times since its first appearance in the U. S. P. The precursor of this Syrup of Wild Cherry was a concentrated infusion. Proctor and Turnpenny (1) in 1842 suggested a formula to saturate the infusion with sugar, thereby making a permanent syrup. This formula was favorably received, and incorporated in the U. S. P. of 1850. The formula given in the U. S. P. VI macerated 120 Gm. of wild cherry bark with water, and collected 350 cc. of percolate. Then 600 Gm. of sugar were added and dissolved. To this syrup were added 50 cc. of glycerin and enough water to make 1000 cc. The U. S. P. VII increased

the wild cherry content to 150 Gm., the sugar to 700 Gm., and the glycerin content to 150 cc. In this formula the glycerin was mixed with the water and used as the first menstruum. The only change made in the U. S. P. VIII was the placing of the glycerin in the receiver, which procedure is similar to that of the British Pharmacopœia. It was the contention that the glycerin was not needed in the menstruum to increase the astringency, but served a useful purpose in keeping the infusion from decomposing and also precipitating a reddish insoluble substance (2). The supposition was that glycerin, when used in the menstruum, dissolved the tannin from the bark, making a bitter syrup (3). Contrary to this the formula in U. S. P. IX increased the sugar to 800 Gm., and reduced the glycerin to 50 cc. using it as a part of the menstruum. Busch (4), advocated going back to the formula in which 15 per cent glycerin was used in the menstruum, and stated that fermentation could be avoided if the percolate were allowed to drop directly into the sugar. It was his contention that an opportunity for fermentation was given when the percolate was collected and the sugar then added. The formula for this product in U. S. P. X was identical with that in U. S. P. IX.

Scoville (5) has stated that one hour was sufficient for maceration, since a short maceration with rapid extraction took out less tannin from the drug, thereby obtaining a syrup of better flavor, with less astringency and less difficulty in combination with alkaloidal solutions. Bibbins (6) suggested the addition of 2 per cent alcohol to prevent mold growth. Both of these suggestions were included in the U. S. P. XI formula.

In reviewing various prescriptions which had been submitted by pharmacists as incompatible or poor in appearance, it was found that in most cases, the addition of more glycerin or alcohol would correct the difficulty. This was especially so with alkaloidal salts. Several experiments were made using varying percentages of glycerin and alcohol, either as part of the menstruum or placed in the receivers.

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta Meeting, 1939.

† From the Control Laboratories, Eli Lilly and Company, Indianapolis, Indiana.

Syrup Used	R No. 1	R No. 2	R No. 3	R No. 4	R No. 5	R No. 6	R No. 7	R No. 8	R No. 9
1	++	9 ++	9 0 9 0	8 0 9 0	7 0 9 +	8 0 9			
2	++	2 +	2 0 2 0	2 0 2 0	2 0 2 0	2 0 3 +			
3	+	3 0	3 0 3 0	4 0 3 0	3 0 3 0	2 +			
4	0	1 0	1 0 1 0	1 0 1 0	1 0 1 0	1 0 1 0			
5	+++	10 +++	10 + 10 +	10 + 10 +	10 + 10 +	10 + 10 +	10 +++	10 0 10	
6	++	5 +	7 0 7 0	7 0 7 0	8 0 8 0	8 0 8 0			
7	++	8 ++	8 0 8 0	9 0 8 0	9 0 9 0	7 0			
8	+	7 +	5 0 4 0	5 0 5 0	5 0 5 0	5 0			
9	++	6 +	6 0 6 0	6 0 6 0	6 0 6 0	6 +			
10	0	4 0	4 0 5 0	3 0 4 0	4 0 (?) 4 +				

0 = clear
 + = slight haze
 ++ = slight precipitation
 +++ = heavy precipitation

Numbers from 1 to 10 indicate a range in color; No. 1 the lightest, and No. 10 the darkest

In view of the foregoing experiments, the authors believe the following formula, using 15 per cent glycerin, would solve many of the prescription difficulties now encountered:

Wild Cherry Bark	150 Gm.
Glycerin	150 cc.
Sugar, Gran.	675 Gm.
Alcohol	20 cc.
Filtered percolate <i>q. s.</i> to make	1000 cc.

Macerate the bark with a sufficient quantity of distilled water for one hour. Run out 400 cc. of percolate using additional water as menstruum as needed. (Filter this percolate brilliantly clear.) Add the sugar and dissolve by agitation, then add the glycerin, alcohol and sufficient filtered percolate to make 1000 cc. and strain.

Conclusions

After trying a number of experiments with varying amounts of alcohol and glycerin as menstruum, the authors have selected a formula similar to the present U. S. Pharmacopœia formula, but containing 15 per cent glycerin as the one most likely to present compatible mixtures with a great variety of commonly used prescriptions.

REFERENCES

- (1) Proctor and Turnpenny, PROCEEDINGS A. Ph. A., page 322 (1858).
- (2) U. S. Dispensary 19th Edition, page 1231.
- (3) Army, "Principles of Pharmacy," 2nd Edition, page 198.
- (4) Busch, JOUR. A. PH. A., 9 (1920), 413.
- (5) Scoville, Bulletin No. 23, Subcommittee 12, page 82.
- (6) Bibbins, Bulletin No. 23, Subcommittee 12, page 101.

A Program of Action for American Youth

The American Youth Commission recently issued, under the above title, recommendations to the American people with reference to the Employment, Health and Education of young people. Copies may be obtained by addressing the American Youth Commission, 744 Jackson Place, Washington, D. C.

Recommendation Dealing with Health

"Adequate medical care for the whole population is a major necessity which is made more urgent by the unfortunate crisis in world affairs. Facilities must be provided where they are now lacking and increased where they are inadequate. Ways must be found to bring the cost of medical care within the means of the large section of the population that cannot afford to pay the whole cost under the present organization of medical service. Consideration should be given to the best method of distributing the costs of illness and medical care for that large group of normally self-supporting persons who are able to meet the average cost of average illness but who may be individually unable, out of current income or savings, to meet the emergency cost of serious or protracted illness. For the poor the provision of adequate medical care must be accepted as a public obligation, since in the long run the cost of neglect is greater than the cost of prevention or cure and falls upon the community as a whole.

"The Commission is convinced that any public health program that will effectively strengthen the nation must have some financial support from the Federal Government. The inequalities among the states in their financial ability to support social services are so great that the improvements necessary for national security cannot be assured by reliance on only state and local resources. The program should, however, operate mainly through the states and through local agencies that are best able to judge of local needs and locally acceptable methods."

The following table shows the varying percentages used, etc.:

Syrup No.	Bark Used	Amount of		Alcohol In Receiver	Run Out	Sugar	Color	Taste	Results on Aging
		Glycerin In Menstruum	Used In Receiver						
1	150 Gm.	100 cc.	....	20 cc.	500 cc.	800 Gm.	Light Amber	Slightly Astringent	Very Slight Haze
2	150 Gm.	....	50 cc.	20 cc.	450 cc.	800 Gm.	Light Amber	Slightly Astringent	Very Slight Haze
3	150 Gm.	....	100 cc.	20 cc.	400 cc.	750 Gm.	Light Amber	Slightly Astringent	Slight Haze at Bottom
4	150 Gm.	....	150 cc.	20 cc.	400 cc.	675 Gm.	Light Amber	Slightly Astringent	Clear
5	150 Gm.	50 cc.	....	20 cc.	500 cc.	800 Gm.	Amber	Slightly Astringent	Hazy
6	150 Gm.	100 cc.	....	20 cc.	530 cc.	750 Gm.	Amber	Slightly Astringent	Slight Ppt. at Bottom
7	150 Gm.	150 cc.	....	20 cc.	550 cc.	700 Gm.	Amber	Slightly Astringent	Slight Ppt. at Bottom
8	150 Gm.	50 cc.	....	50 cc.	500 cc.	800 Gm.	Amber	Slightly Astringent	Slight Ppt. at Bottom
9	150 Gm.	50 cc.	....	100 cc.	450 cc.	750 Gm.	Amber	Slightly Astringent	Slight Ppt. at Bottom
10	150 Gm.	50 cc.	....	150 cc.	450 cc.	700 Gm.	Amber	Slightly Astringent	Slight Ppt. at Bottom

All of the above experiments were finished to 1000 cc. with filtered percolate.

The following prescriptions were compounded, using the various syrups made above, and set aside for aging and observation.

R̄ No. 1

Codeine Sulfate	Grs. 2
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 2

Codeine Phosphate	Grs. 2
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 3

Codeine Sulfate	Gr. 1
Ammonium Chloride	Grs. 15
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 4

Codeine Phosphate	Gr. 1
Ammonium Chloride	Grs. 15
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 5

Morphine Sulfate	Grs. 2
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 6

Codeine Sulfate	Grs. 2
Ammonium Chloride	Grs. 25
Potassium Iodide	Grs. 25
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 7

Codeine Sulfate	Gr. 1
Hydrocyanic Acid	Min. 7½
Spirits Chloroform	Min. 11½
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 8

Codeine Phosphate	Gr. 1
Syrup Tolu	Fl. drs. 4
Syrup Wild Cherry <i>q. s.</i>	Fl. oz. 1

R̄ No. 9

Codeine Sulfate	Gr. 1
Ammonium Chloride	Grs. 10
Syrup Wild Cherry	Fl. drs. 2
Simple Syrup <i>q. s.</i>	Fl. oz. 1

The results are tabulated in the chart which appears on page 75.

Syrup Used	R No. 1	R No. 2	R No. 3	R No. 4	R No. 5	R No. 6	R No. 7	R No. 8	R No. 9
1	++	9 ++	9 0	9 0	8 0	9 0	7 0	9 +	8 0
2	++	2 +	2 0	2 0	2 0	2 0	2 0	3 +	3 0
3	+	3 0	3 0	3 0	4 0	3 0	3 0	2 +	4 0
4	0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0
5	++++	10 +++	10 +	10 +	10 +	10 +	10 +	10 +++	10 0
6	++	5 +	7 0	7 0	7 0	7 0	8 0	8 0	7 0
7	++	8 ++	8 0	8 0	9 0	8 0	9 0	7 0	9 0
8	+	7 +	5 0	4 0	5 0	5 0	5 0	5 0	5 0
9	++	6 +	6 0	6 0	6 0	6 0	6 0	6 +	6 0
10	0	4 0	4 0	5 0	3 0	4 0	4 0 (?)	4 +	2 0

0 = clear
+ = slight haze
++ = slight precipitation
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Consumer Incomes and Consumer Expenditures in the United States

Studies by the National Resources Committee

These reports, covering 300 printed pages, are illustrative of the basic studies being made by various divisions of the Federal Government and some of which can be employed to good advantage by pharmacists. Copies can be obtained from the Superintendent of Documents, Washington, D. C., the first at 30 cents and the second at 50 cents.

Both reports cover 1935-1936 and include the 29,000,000 families of two or more persons (average 3.9), the 10,000,000 single persons and the 2,000,000 persons living in institutions of various types.

"The total volume of income flowing into the hands of the Nation's families and individual consumers during 1935-1936 was approximately \$59.3 billion. Out of this amount, \$50.2 billion, or about 85 per cent, was spent for current consumption; \$2.2 billion, or nearly 4 per cent, was used for gifts to relatives and friends and for contributions to the church and to philanthropic agencies; and about \$900 million, or 1½ per cent, was paid out as income taxes, poll taxes and certain minor personal property taxes. The remaining \$6 billion—10 per cent of total income—was saved."

The \$50.2 billion spent for current living expenses covered: (1) Food, \$17 billion, or 29% of income; (2) Housing, \$9.5 billion, or 16%; (3) Household operation, \$5.3 billion, or 9%; (4) Clothing, \$5.3 billion, or 9%; (5) Automobile expenditures, \$3.8 billion, or 6.5%; (6) Medical Care, \$2.2 billion, or 4.3%; (7) Recreation, \$1.6 billion, or 3.2%. Personal care, tobacco, reading and miscellaneous items took care of the remainder.

One-third of the Nation's 39 million families and individual consumers had incomes of less than \$780, average, \$471; one-third had incomes between \$780 and \$1450, average \$1076; and one-third between \$1450 and over a million, average, \$2959.

Of the \$50.2 billion used for current living expenses, the lower third in the income level

spent \$7 billion, or 14%, or \$550 per consumer unit; the middle third spent \$14 billion, or 28%, or \$1056 per unit; and the upper third spent \$29 billion, or 58%. The average total expenditures of the lower third exceeded the average income by about 20%, the middle third about broke even, and the upper third showed an increasing large excess of income over expenditures as the income went above the minimum of \$1450.

Medical care, \$2.2 billion per year, included payment to physicians, oculists, dentists and other specialists, expenses for clinical or hospital care, special examinations and tests, medicines and drugs, eye glasses and opticians' fees, medical appliances and supplies, and accident and health insurance. Free medical care is estimated to cost \$650,000,000 in addition, bringing the Nation's medical bill to a total of \$2,850,000,000.

The lower third in the income level spent \$20 per consumer unit or about \$7 per person per year for medical care; the middle third, \$41 and the upper third, \$107. The average is \$56, or \$18 per person. To this should be added \$17 as the cost per unit of free medical care which brings the total per unit to \$74 and per person to \$23.

It is interesting to note that the expenditures per year for medical care by single men vary from \$5 to \$525 for different income levels while single women spend from \$4 to \$320.

These figures covering medical care do not segregate the cost of the items in which pharmacists are principally interested. Comparisons are made, however, to the studies of the Committee on the Costs of Medical Care which gave \$3.656 million as the cost of medical services for the American people in 1929 as compared to \$2850 million in 1935-1936. This corresponded, approximately, to \$30 per person per year or to 4% of the total income. Of the total expended for medical care in 1929, 18.2% or approximately \$650 million was spent for drugs, medicines and medical supplies. If this percentage applied in 1935-1936, the American people spent about \$518 million for these articles.

Local and Student Branches

CHICAGO.—The 262nd meeting was voted a success by the more than one hundred members and friends in attendance on the evening of January 16, 1940. The evening began with a pre-meeting dinner at the Boston Oyster House of the Morrison Hotel in Chicago in honor of three of the Branch's most loyal and steadfast members: Mr. Wm. Gray, pharmacist at the Presbyterian Hospital, Mr. I. A. Becker, pharmacist at the Michael Reese Hospital and Mr. R. A. G. Linke of the Wright and Lawrence Drug Co. of Chicago. After a successful dinner, attended by more than forty members and friends, the group returned to the usual meeting place at the University of Illinois College of Medicine where approximately sixty others had already congregated.

President Templeton opened this portion of the meeting with a call for business to be taken up for the evening. A motion was made by Dr. G. L. Webster, seconded and carried, that the following statement be spread on the minutes of the January 1940 meeting of the Chicago Branch: "The Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION did hold a testimonial dinner in honor of Messrs. Wm. Gray, I. A. Becker and R. A. G. Linke on the evening of January 16, 1940, and the entire meeting on that night was held in their honor."

The speaker of the evening was Dr. P. C. Barton, Director of the Bureau of Investigation of the American Medical Association. Dr. Barton presented, under the title of "Patent Medicine Labels," an interesting illustrated lecture on new labels for Patent Medicines as revised to meet the requirements of the new Federal Food, Drug and Cosmetics Law and the advantages of this law and of the new labels to the physician, the pharmacist and the public.

Dr. Barton discussed the old and new Food and Drug acts, showing slides of the labels of various patent medicines illustrating the changes in label made necessary, progressively, by each act.

Dr. Barton explained the functions of the Bureau of Investigation and listed among them the collection of information on labels from all sources, which was covered in their files at the present time by about 400,000 cards on frauds, quacks, etc. "Such information," he said, "was available to all inquirers." The speaker also cited the fact that \$715,000,000 was the total annual cost of medicine in the United States, and of this amount, 27% was for prescriptions, 23% for home remedies as Epsom Salt, etc., and 50% for secret formula patent medicines. As to the actual results, both good and bad, of the new Food, Drug and Cosmetics Act, Dr. Barton stated that only time will tell. We must wait until a number of test cases on various parts and points of the law come up before we can draw any conclusions.

The meeting was adjourned with a rising vote of

thanks to Dr. Barton for his informative and interesting address.

EDWARD E. VICHER, *Secretary*

CITY OF WASHINGTON.—The January meeting held at the American Institute of Pharmacy on the 18th was preceded by a dinner attended by members, their wives and friends. The guests of honor were Representative Herve Tibbott of Pennsylvania and Mrs. Tibbott and Representative Carl Durham of North Carolina. Representatives Tibbott and Durham are pharmacists and both spoke of the deep interest in the profession, of their desire to be helpful in every way possible and their pleasure in meeting with fellow pharmacists. Both gentlemen were invited to attend future meetings.

The business meeting was held after the dinner, President Hall presiding. After the transaction of routine business Mr. L. E. Warren, a former president of the Branch, gave an illustrated lecture on "The Drugs of the Bible." Mr. Warren has made an intensive study of this subject and his address was very interesting and informative. At its conclusion he was given a rising vote of thanks.

The meeting concluded with the installation of the following officers, elected at the previous meeting, and a vote of thanks to the retiring officers for their efficient services:

President, Kenneth L. Kelly; *First Vice-President*, D. L. Maxwell; *Second Vice-President*, Royce Frazoni; *Third Vice-President*, Paul Reznick; *Secretary*, C. O. Wilson; *Treasurer*, Wm. T. McCloskey.

CHARLES A. WILSON, *Secretary*

CONNECTICUT COLLEGE OF PHARMACY STUDENT BRANCH.—The January meeting was held on the 12th, at the college. The reports of the secretary, treasurer and the chairman of the membership committee were approved.

The Branch considered itself most fortunate to be addressed by Dr. C. C. Furnas, Professor of Chemical Engineering at Yale University, and author of "The Next 100 Years in Chemistry." His topic was, "The Struggle of Living Matter," and dealt with the following two ideas: (1) The omnivorousness of man has permitted his existence all over the globe; he has a highly complex mechanism, the result of nutritional requirements evolved a million years ago. When the body misses some of its requirements, there results the deficiency troubles such as those from vitamin deficiency, etc.; (2) the problem of senility. Science has had a definite effect on the human race in that the infectious diseases of childhood have been brought under control. Since fewer die as children more live to middle age with the result that the age distribution is upset. According

to statistics, in 1915 one in 16 lived to 60 years of age; in 1930 one in 12; in 1950 one in 8; and in 1980 one in five. Since more people are alive after their 60th year, a new sociological problem, that of senility, presents itself. How are those with senility to be taken care of? In the past practically all scientific efforts have been made to serve and extend the lives of infants and children. Now science must work to retard and prevent senility; but before it is known as to what is senility, the scientist will have to determine what living matter actually is. Dr. Furnas' talk was well received and a rising vote of thanks accorded him.

Also on the program was shown an interesting film entitled, "The Anemias," through the courtesy of Eli Lilly & Co., under the sponsorship of Drs. Jolinson and Fenney, of the college.

CHARLES BLUMENTHAL, *Secretary*

FERRIS INSTITUTE—The regular meeting was held January 24th, with Henning Engmark presiding.

The speaker of the evening was Dr. Hall, head of the Local Health Bureau of Mecosta County, who chose for his topic "Relations of Pharmacy and Public Health." He spoke of the past and present relationship of the physician and pharmacist. He said, "We need a closer working relationship between the physician and pharmacist." He spoke concerning drugs, patent medicines and manufactured pharmaceutical preparations in regard to the layman. The relationship would be, probably, much better if competition between patent medications was not present. Dr. Hall stated that "Public health includes all social welfare—really public relationship in regard to health." Pharmacy may be beneficial in promoting public health. Dr. Hall made this statement, "Until people are educated to the level of seeing the value of drugs there will be no demand for the service of the true pharmacist, neither will a pharmacist be able to sell himself."

Following Dr. Hall's talk an open forum was held.

MORRIS E. FOCKLER, *Secretary*

MICHIGAN.—The November meeting was held Tuesday evening, November 21, 1939, in the Wayne County Medical Society Building, preceded by a sumptuous Thanksgiving dinner attended by thirty members and friends.

The business meeting was called to order by President Whitney at 8 p.m. The minutes of the previous meeting were read by the secretary and approved.

Mr. McCabe then asked the president if it were not possible to obtain more information regarding the new Food and Drug Law. He said he had spent considerable time trying to obtain reliable, up-to-the-minute data, and seemed to be unable to get any real concrete information or interpretation of the

law. It was suggested that a meeting given over to this subject in the near future would be very helpful to Pharmacy.

President Whitney then introduced the first speaker of the evening, Mr. Winthrop D. Hall, a senior pharmacy intern at the University of Michigan Hospital, Ann Arbor, who presented a very interesting paper on "The History and Development of Hospitals." The speaker covered the field thoroughly, going back to the time the first hospital was founded. It was interesting to note the rapid strides made in the advancement of the hospital since the nineteenth century.

The second speaker was Mr. Donald R. Creagan, a junior pharmacist at the University Hospital, who spoke on the "Classifications and Standards of Hospitals." He told of the many advancements made in establishing standards for hospitals since the establishment of the College of Surgeons in 1913. The first step he said was to put surgery on a higher plane. The application to membership in the College of Surgeons had to be accompanied by data on at least one hundred surgical cases. He said this made it difficult for most physicians to qualify. The advancement of Pharmacy in the approved hospital of to-day was of much interest to the pharmacist. The College of Surgeons demand an approved pharmaceutical service within the institution or a connection with an approved drug store.

Mr. Creagan's interesting paper brought about much discussion. Dean Lakey of Wayne University College of Pharmacy, asked how many hospitals rendered pharmaceutical service. Mr. R. L. McCabe questioned the term "approved drug store" and by whom approved. Mr. Webster asked the speaker what was meant by a "Sanitary Code" as recommended by the college. The speaker, ably assisted by Mr. Whitney, whose position as chief pharmacist at the University Hospital, and knowledge of the operation of the modern hospital, answered the many questions to the satisfaction of all. Mr. Whitney also explained the method necessary in handling of narcotics in the hospital. Accurate records are necessary and kept by the hospital pharmacy just as the individual drug store.

President Whitney thanked Mr. Hall and Mr. Creagan for their efforts. A rising vote of thanks was given to the speakers for their most interesting papers.

BERNARD A. BIALK, *Secretary*

NEW YORK.—The regular meeting was called to order by President Canis at 8:35 p.m. on Monday, January 8th, at Columbia University College of Pharmacy. Ninety members and guests were present. Minutes of the December meeting were approved as read. The Treasurer, Mr. Currens, presented his report for the month and for the year 1939 and said that the finances of the Branch are in a healthy condition. Dr. Billhuber reported that he had audited the books of the treasurer and found them to be correct. Mr. Lehman read the report

of the Committee on Education and Legislation, which was accepted and ordered attached to the minutes.

Under new business, Dr. Wimmer offered a plan whereby students might be aided in the formation of a Student Branch. Since the plan affected the finances of the Branch, the matter was referred to the Executive Committee to be discussed before the regular meeting in February.

President Canis called on Mr. George Mather, Secretary of the New York State Board of Pharmacy, who announced that he was making arrangements with the Chairman of the Program Committee to appear before the Branch and talk on the new label laws and explain how they affect pharmacists.

Dr. Hugo Schaefer moved that a vote of thanks be accorded Dr. Canis, the retiring president, and Mr. Gustave Bardfeld, Chairman of the Program Committee for the success they had had in increasing the attendance at the meetings and for the varied and worthwhile programs provided. Also that a separate page of the minutes be devoted to this expression of appreciation. The motion was seconded.

The meeting turned to the Scientific Section with Mr. Bardfeld presiding. Mr. Lester H. Mercer, Director of Red Cross Products, Johnson and Johnson, discussed "First Aid and Your Profession."

Mr. D. A. Fries, Salesmanager, Davol Rubber Co., read a paper entitled "Mr. Druggist, You Are a Merchant."

A rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

PITTSBURGH.—The Branch met Tuesday, January 16th, in the main lecture hall of the Falk Clinic.

Officers were elected and installed. This was one of the finest and best attended meetings the Branch has had for several years.

The speakers of the evening were Dr. Bernard F. Daubert and Dr. Edward C. Reif, members of the faculty of the School of Pharmacy, University of Pittsburgh. Their subject was "Vitamins." Dr. Daubert presented the chemistry of the newer Vitamins in a manner that made this involved subject deeply interesting to his audience, and Dr. Reif considered the pharmacological and therapeutic aspects of the subject, and brought out many unusual points in regard to the newer vitamins.

The meeting resolved itself into a forum, and the discussion which followed was enthusiastic and valuable. The chemist's, physician's and pharmacist's viewpoints were expressed and made this an enjoyable and delightful three-hour session.

All pharmacists and their friends are welcome to take part in the series of lectures to follow.

FRANK S. MCGINNIS, *Secretary*

RHODE ISLAND COLLEGE OF PHARMACY STUDENT BRANCH.—On October 13, 1939, the first monthly meeting was held. Professor Fitzsimon presided

due to the absence of President Larry Bartley. Later the meeting was taken over by Vice-President Robert Smith.

The report of the convention of the A. P. H. A. was made to the student body. Dean Henry Rivard represented the Branch at the convention.

Professor Fitzsimon appointed Venla Hyytiainen to act as temporary secretary for the remainder of the year due to the absence of the regular secretary. A motion was made to appoint a committee of three to contact the underclassmen for new members. Those appointed were Mignacca, Clark and Earnshaw.

The monthly meetings are to be held hereafter on the third Friday of every month.

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The regular monthly meeting was held November 17, 1939.

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On December 5, 1939, the meeting was opened by John Stadnik who introduced Dr. Althoff from Sharp and Dohme. Dr. Althoff gave a very interesting talk on "Biological Products." The meeting was attended by the whole student body. At the end of the meeting the students gave a great vote of thanks to Dr. Althoff, and expressed the hope that he might return in the near future.

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A Christmas dance was held at Hotel Hixon, North Attleboro, Mass.

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On January 12, 1940, the meeting was opened by John Stadnik who introduced Dr. Church of Brown University. Dr. Church had slides of his travels in Southern Europe; he also showed us "Botanizing in Color." It was very interesting and was enjoyed by all. Thanks were extended to Dr. Church.

VENLA HYYTIAINEN, *Temporary Secretary*

ST. JOHN'S UNIVERSITY STUDENT BRANCH.—The regular meeting was called to order Friday, December 21st, at the college. Following the roll call there was an open discussion regarding the future work of the Branch and methods for interesting other students in its work. It was suggested that the proceedings of our meetings be printed in some form and distributed to members and students. A committee of four, Sister Etheldreda, Simon Mostofsky, C. Martino and A. Moskowitz were appointed to investigate and report on the question of a publication at the next regular meeting.

The suggestion that a list of N. F. problems be obtained as a basis for research by the students, was made; also that a certain time be set aside to be devoted to reading of abstracts prepared by members from current scientific publications.

Communications from Dr. Little, New Orleans (Loyola) and Connecticut schools of pharmacy were read and discussed.

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The meeting was called to order Friday, January 5th, at the college. Following the roll call an open discussion was held regarding research by students. Professor Coreoran answered several questions regarding the use of the school laboratories, which will be available Saturday mornings.

Several abstracts were read. Outstanding was the paper on "Cuticolor Preparations," prepared by D. Rogoff and presented by Mr. Edelson.

It was decided by the group that the illustrated lecture on "Controls in Manufacturing" and "Vitamins" by E. R. Squibb & Son be presented at the next meeting. Also that the Winthrop Chemical Co. be contacted regarding their illustrated lectures

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The regular meeting was called to order Friday, January 12th, at the College. Following the roll call, non-members of the Branch were welcomed. By popular vote it was decided that Winthrop Chemical Co. be asked to loan us their films on "Diagnosis of Urological Conditions" and "Modern Methods of Anesthesia."

Mr. Clark, representative of E. R. Squibb & Sons, by means of a sound projector, presented the topics "Scientific Control in Manufacturing" and "Vitamins." Both films proved timely and of exceptional interest to those present. Following the showing a booklet "Squibb Vitamin Instruction Course 1940" was distributed to all present.

Those interested in doing research are to meet in the pharmacy laboratory, Saturday, January 28th.

L. ROSENSTEIN, *Chairman*

STATE COLLEGE OF WASHINGTON STUDENT BRANCH.—The meeting was called to order by the president, Gilbert Whipps. Minutes of the previous meeting and a report of the banquet were read and approved.

Mr. Whipps suggested that we start a drive for new members. He also outlined some of the proposed activities of the year including speakers, movies, banquets and so forth. It was suggested that an open meeting be held soon after the Pharmacy Mix.

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At a meeting of faculty and students of the School of Pharmacy held Wednesday evening, October 11th, Mr. Ronald Robertson, manager of Whitlock's Pharmacy in Spokane, gave an inspiring address. He discussed some of the current problems confronting proprietors of professional drug stores. As an example he brought out the problem caused by having so many different proprietary preparations on the market, such as the thirty different vitamin

preparations manufactured and distributed by about two hundred different manufacturers. He emphasized the fact that no druggist should substitute one preparation for another on the doctor's prescription even in such cases.

To illustrate his points, Mr. Robertson told some amusing and interesting stories, some of which were his own personal experiences.

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Mr. I. R. Bander, national sales manager of McKesson-Robbins, largest drug organization in the world, spoke to students and faculty of the School of Pharmacy at a general meeting Wednesday afternoon, October 18th. Mr. Al Ekman and Mr. John O'Connor, both of the Spokane branch of the McKesson-Robbins drug organization, were also introduced by Dean P. H. Dirstine. In his address to the students, Mr. Bander stressed particularly the merchandising phase of retail drug work, illustrating his talk with blackboard drawings and diagrams.

"The drug business is the greatest of its kind in the world, because everyone is a potential customer," stated Mr. Bander. "With its various departments—prescriptions, medicines, toiletries, candy, fountain and sundries—the average drug store serves 2000 people or 500 families," he continued.

"Students must realize how important it is to actually serve all of these persons and to gain their continued patronage when they become store owners themselves. The average drug store, which makes approximately \$50.00 a day, only makes a profit of one cent for each customer served; therefore, every pharmacy student should learn the basic principles of salesmanship even before graduating from college," he emphasized.

Mr. Bander, who was formerly the president of the Rexall Drug Company, is making a tour of the sixty-five wholesale branches of his present firm. He visited several of the retail drug stores here in Pullman after speaking at the college.

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Mr. Jack Lynch, secretary of the Idaho State Board of Pharmacy, spoke to faculty and students of the School of Pharmacy at a meeting held Tuesday afternoon, October 31st. Dean P. H. Dirstine introduced Mr. Frank Striebel of the law enforcement department of the state of Idaho, who, after a few brief remarks, called on Mr. Lynch.

"Pharmaceutical Organizations" was the topic of Mr. Lynch's address. He stressed the importance of cooperation among all members of the profession, illustrating his point by citing some of the activities of the National Association of Retail Druggists, the strongest trade organization in the world.

"There are forces at work to destroy the professional standing of our calling," he said, "therefore we should all work together for the common good." "We need enthusiasm in addition to intelligence and knowledge," he continued. Mr. Lynch also pointed out the advantages as to training and instruction

hat students in modern schools of pharmacy are receiving to-day.

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A moving picture entitled "Along Main Street" was shown to faculty and students of the schools of pharmacy and Business Administration and to members of the Bookstore staff on Wednesday evening, November 8th. The picture, which was shown through the courtesy of the Coca-Cola company, cleverly illustrated the five main principles of salesmanship: personal appearance, cheerful voice, pleasant facial expression, interest in the customer and enthusiasm.

"Along Main Street" was an entertainment feature of the A. PH. A. convention at Atlanta, Georgia, last summer. At present it is being shown in various places throughout the country.

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A joint meeting of Rho Chi, Lambda Kappa Sigma and the AMERICAN PHARMACEUTICAL ASSOCIATION STUDENT BRANCH was called to order November 15th by Joe Fredericks, Rho Chi president. The purpose of the meeting was to discuss parliamentary law and the general procedure to be followed during business meetings of organizations. Mr. Hugh Vincent gave a brief address outlining the origin, functions and applications of "Roberts Rules of Order." He then led a general discussion and drill in parliamentary procedure.

A similar meeting of the three organizations is being planned for some time in the near future.

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The meeting on December 15th was called to order by President Whipps, who introduced Mr. Ralph Herbison, representative of Sharpe and Dohme. He began his remarks by stating why one should be glad that he is in Pharmacy instead of being a highly-publicized football player, his reason being that the pharmacy graduate has an opportunity to develop new products and carry on research, while the football player is through at the end of the season.

Mr. Herbison told of the development of a belladonna preparation which is used in the treatment of Parkinson's disease. He also gave the history of H. K. Mulford and Sharpe and Dohme, and concluded his remarks by discussing the use of bee venom in the treatment of arthritis. He mentioned the fact that three former Washington State graduates have recently become affiliated with his company.

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The meeting was called to order by Vice-President Banich, on January 10th. There being no objections, the reading of the minutes was dispensed with.

Dr. Dirstine introduced Mr. Robert Grady and his father, Mr. M. J. Grady, of Colfax, Washington

who discussed the Washington State Pharmaceutical Association and the recent legislation which had been sponsored by that organization. The bills he discussed were the Fair Trade Regulations, the Act dealing with filing and initialing of prescriptions, the new Prophylactic Act and the Barbituric Acid Law.

Mr. Grady stated that he had been in business for the past forty-six years, during which time he had seen a great improvement in Pharmacy. He stated that forty-six years ago a drug clerk received \$50.00 per month and worked from twelve to fifteen hours per day. Due to better volume and better regulation at the present time, conditions are much improved. He brought out the fact that Washington was the second state in the union to pass Fair Trade Legislation. At the present time there are forty-five states with such regulations. After he had finished talking, there was a round-table discussion, during which student members asked many questions regarding the drug business and regulations applying to it.

Dean Dirstine thanked Mr. Grady for the very interesting discussion.

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The joint meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION, Rho Chi Society and Lambda Kappa Sigma on January 13th, was opened by Rho Chi's President, Joe Frederick, who introduced Prof. H. C. Vincent, who then conducted the meeting demonstrating Robert's Rules of Order. Motions and amendments were made in order to demonstrate which motions had precedence over others, and whenever it became necessary, time was taken to explain the different rulings. The meeting developed into a lively and interesting session.

HAARON BANG, *Secretary*

TEMPLE UNIVERSITY STUDENT BRANCH.—The meeting at Temple University was called to order at eight o'clock, Tuesday, November 7th. Minutes of the previous meeting were read and approved without correction or addition.

President Johnson read an invitation extended to the Student Branch by the parent body, the Philadelphia Branch of the A. PH. A., to attend a meeting of that group held on Tuesday, November 14th, at which time a discussion of modern studies on hormones was to be presented.

A paper entitled "Drugs of the American Indian" was presented by Roselle Rumore, Pharmacy '41. Miss Rumore had for inspection specimens of the many crude drugs under discussion. She presented the history and evolution of their uses, and commercial methods of collection and preparation of the plants.

Miss Steigerwald, Pharmacy '42, with the aid of a map of the world, described the "Geography of Medicines." The information extended was new to many members and of interest. A large map of the United States, showing the chief commercial

drug plant grown in each state was presented and discussed by the members of the Student Branch.

Mr. Krigelman, chairman of the Program Committee, thanked the members who so graciously took part in the program of the evening, and announced the program for the next meeting.

Mr. Lipinan announced the plans under way for the appearance of a representative of the Division of Pharmacy, United States Navy and a representative of the United States Civil Service Commission, to speak before the entire Student Body of the Pharmacy School, under the sponsorship of the Student Branch.

It was suggested that a complete set of pamphlets concerning the Pharmacy Survey made in St. Louis about 1935 by the Government, be presented to the School library by the Student Branch.

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The regular monthly meeting was held at Mitten Hall, December 5th.

Dr. Eby, faculty advisor of the Student Branch, introduced the speaker of the evening, Dr. Arthur Osol, Professor in Chemistry at P. C. P. & S., and President of the Philadelphia Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION. Dr. Osol chose as his subject, "The Merry Go Round of Chemistry"—a discourse on the work done at the University of California by Dr. Lawrence, winner of the Nobel Award. Dr. Lawrence perfected the Cyclotron, a 65-ton apparatus consisting of a pan cake shaped center and two huge electro magnets. The Cyclotron is the merry-go-round which spins atoms and particles and imparts to them a velocity equivalent to thousands of volts of energy. These tremendously energized particles are directed at a target, usually a larger atom, and produce atomic disintegration with the production of a class of new substances, isotopes of our common elements, but with a larger atomic weight. At the same time extremely great quantities of energy are released. Dr. Osol presented slides picturing the Cyclotron, and also the reactions involved in the formation of the new substances.

Dr. Osol spoke of the alpha, beta and gamma rays which emanate from radium, and other radioactive substances, reported by Rutherford in 1919, who produced heavy oxygen, with an atomic weight of 17. This transmutation was accomplished by bombarding nitrogen with alpha particles from radium.

Lawrence's Cyclotron offers a more efficient and thorough, and less expensive means of obtaining similar transmutation. Radium sodium, which is radioactive sodium chloride, in which sodium has an atomic weight of 24, has been produced. Radium sodium yields on disintegration, magnesium and up to three million volts of energy. Phosphorous yields sulfur, beryllium yields boron. Up to 250 of these new elements have been produced by the Cyclotron.

Dr. Osol pointed out that this investigation has

shed much light on atomic structure. Physiology has also benefited by the application of the new findings. These new substances may be used in anemia, leucemia, phosphorous and thyroid deficiencies, and possibly in cancer, because of their destructive influence on tissue. The characteristic half life period of these substances makes their identification easy to establish.

Dr. Osol expressed the best wishes of the parent body and extended an invitation to attend the meeting Tuesday, December 12th, at which time Dr. Arthur E. James, Professor of Chemistry at the School of Pharmacy of Temple University would discuss "Recent Developments in the Chemistry of Enzymes."

Mr. Johnson was requested to present a summary of the work so far accomplished by the Student Branch, to the Philadelphia Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION at its December meeting.

The second portion of the evening program consisted of a demonstration of faulty and correct methods of compounding several difficult and ostentatiously incompatible prescriptions. Miss Plebian, and Messrs. Reese, Johnson and Vogt each presented one prescription, with an explanation of the particular incompatibility involved, and the scientific method of compounding. Dr. Osol, who conducts a column of Queries and Answers and prescription problems, commended the group on its demonstration. Thanks are due Mr. Eugene Reese for the work he did in preparing this portion of the program.

REBA NEVEL, *Secretary*

WESTERN NEW YORK.—A joint meeting of the Western New York Branch with the Academy of Medicine was held at the Buffalo Museum of Science on January 10th, at 8:45 P.M., as a Therapeutic Forum. Over two hundred pharmacists and physicians were present.

Dr. L. Maxwell Lockie, professor of Therapeutics, presided while Drs. Clayton W. Greene, A. H. Aaron, David K. Miller, professors of Medicine; Dr. Arthur J. Reissig, endocrinologist, Mr. Mearl D. Pritchard of the Buffalo Academy of Pharmacy, and Mr. Raymond E. Schmitz, president of the Western New York Branch, took part in the panel discussion. The questions covered most of the newer therapeutic agents, their uses and abuses, the best flavoring agents for specific drugs, and the most desirable professional relations between the pharmacist and the physician. The formal discussion terminated at 10:30 P.M. but pharmacists and physicians continued to discuss their related problems until 11:30 P.M.

Members of the Academy of Medicine and the Academy of Dentistry will be guests of the Branch on March 7th, on the University Campus.

MARGARET C. SWISHER, *Secretary*

Association Business

COUNCIL LETTER NO. 4

December 12, 1939

The Second Meeting of the Council was held at the AMERICAN INSTITUTE OF PHARMACY, Washington, D. C., on Sunday, December 3, 1939, beginning at 10:15 A.M. with the following members present: Hilton, Chairman, DuMez, Dunning, Costello, Jenkins, Swain, Christensen, Fischelis, Little, Lascoff, Ford and Kelly.

The reading of the minutes was dispensed with since they had been sent to the members of the Council by mail. It was suggested that an agenda, covering the items to be considered, be sent to the members of the Council in advance of future meetings of the Council.

33. *Committee on Standard Program.* Chairman DuMez submitted a verbal report with respect to the arrangements so far completed for the 1940 annual meeting in Richmond. The Local Secretary has been elected and it is expected that a recommendation will be submitted to the Council at an early date naming the headquarters hotel.

The date of the meeting is yet to be determined, and it was pointed out that this meeting in Richmond would precede the U. S. P. Convention to be held in Washington, May 14 and 15, 1940.

After a general discussion, it was voted on motion of Dunning-Christensen, that the regular program for the meeting be continued, the dates being May 5th to 11th, and that the entertainment features be deferred as far as possible to the end of the week of the meeting.

34. *Committee on Recipe Book and Committee to Develop Advertising for the N. F. and R. B.* Chairman Lascoff submitted a verbal report of progress covering the sales of the R. B. II since the Atlanta meeting, the stock of bound and unbound copies on hand, the expected sales during 1940, suggestions with respect to the advertising of the book during the coming year, and the work being carried on by the Committee in the revision of the text. Arrangements have been made to carry an informative article about the R. B. II in each issue of the new publication.

After a general discussion of the report, it was moved by Swain, seconded by Jenkins, that the sum of \$500.00 be appropriated for advertising R. B. II during 1940, of which \$275.00 may be expended for an advertisement in a special journal suggested by Chairman Lascoff provided the Committee to Develop Advertising for the N. F. and R. B. approves the advertisement after further study.

35. *Committee to Nominate a Chairman of the Committee on N. F. and Director of the A. Ph. A. Laboratory.* Chairman Jenkins stated that certain

changes had been made in the tentative list of nominees for this combined position which was considered during the meetings of the Council held in Atlanta, and read the letter sent by the Committee to those who were suggested for the position.

Chairman Jenkins reported that the Committee unanimously recommended that Dr. Justin L. Powers of Ann Arbor, Mich., be elected to this combined position.

On motion of Jenkins-Little, Dr. Powers was elected Chairman of the Committee on N. F. and Director of the A. Ph. A. Laboratory at a salary of \$6000 per annum, subject to the acceptance of an agreement which among other things should contain that the appointee may be removed by the Council for cause or the term of office may be terminated upon conditions mutually agreed upon.

On motion of Dunning-Fischelis, it was voted that Dr. Powers' employment shall become effective as of March 1, 1940.

On motion of Dunning-Christensen, it was voted that the services of the retiring Chairman of the Committee on N. F., Dr. E. N. Gathercoal, be continued in an advisory capacity from March 1 to May 15, 1940, with an honorarium of \$1000 for the period from January 1st to May 15, 1940.

It was moved by DuMez that a message of greeting be sent to Dr. Gathercoal to be followed by a letter expressing the appreciation of the Council for his splendid services and for his willingness to continue to serve in the work of the Committee. The motion was seconded by Dunning and carried.

The session adjourned at 1:45 to reassemble at 3:00 P.M.

36. *Committee on Publications.* Chairman DuMez reported the progress made toward carrying out the program adopted at Atlanta for issuing the JOURNAL OF THE ASSOCIATION in two editions after January 1, 1940. Secretary Kelly supplemented this report by submitting samples of paper, cover designs and estimates covering costs, for both editions. After a general discussion of various phases of the program, the following actions were taken.

On motion of Dunning-DuMez, it was voted that the title of the edition which will carry scientific articles, reports and abstracts, shall be Scientific Edition, JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

On motion of Dunning-Lascoff, it was voted that the title of the edition which will carry all other matters shall be Practical Pharmacy Edition, JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, and that each issue of this edition shall for the present carry about 48 pages with or without cover as may be decided after detailed bids are received.

It was voted, on motion of Dunning-Costello, that the selection of type or design of lettering for the

two editions be referred to the editors with the suggestion that they should be distinctive.

Consideration of the subscription price of the Practical Pharmacy Edition was deferred until a later date on motion of Swain-Dunning,

It was understood that a budget for both editions will be included in the Budget for 1940 which will be submitted to the Council by mail later in December, and that other actions with respect to either or both of the editions that may become necessary will be taken by mail vote.

37. *Committee on Finance.* Chairman Swain read the following report:

Receipts: "There are given below the receipts for the first ten months of 1939, as compared with the year's estimates:

	Receipts	Estimate for Year
Research Fund	\$ 3,000 00	\$ 3,000.00
Maintenance Fund	16,500.00	16,500.00
Dues	9,845.01	15,500.00
JOURNAL, Abstracts and		
Miscel. Publications	9,506 74	13,000 00
N. F. and Bulletins	7,233.56	14,860.00
Recipe Book	6,330.41	4,308 00

The bills for dues for 1940 were sent out on December 1, 1939.

Disbursements: The disbursements for General Expenses total \$31,474.59 against the appropriation of \$43,695.00 for the year. Of the Appropriations for General Expenses, only 3 have been exceeded: Number 5 (Printing, Postage and Stationery) due to the publicity in connection with the Food, Drug and Cosmetic Act, the Uniform State Pharmacy Act and various other bulletins; Number 11 (Miscellaneous) due to charging off bad checks for dues payments covering 8 years; and Number 19 (Committee on Membership) due to letters sent out in membership campaign under President Laseoff and to the increase in rebate to Local and Student Branches.

It is recommended that \$200.00 be added to Item 5; \$100.00 to Item 11 and \$300.00 to Item 19, for 1939.

Of the appropriations for Open Accounts, which cover the JOURNAL, National Formulary and Recipe Book, none have been exceeded and the disbursements for this period total \$20,585.19 against the appropriation of \$23,800.00 for the year.

It should be noted that the receipts total \$52,415.72 and that the disbursements total \$52,059.78. It is expected that the Association will operate for the year within its budget."

On motion Swain-Costello, the report was accepted and the recommendations therein adopted. Copies of the present budget were furnished to the members of the Council and suggestions with respect to several items were submitted for consideration by the Committee on Finance in preparing the budget for 1940.

An informal discussion of the securities held by the Association and of the investment of accumu-

lated surpluses in several funds followed. It was understood that the Committee on Finance will give further study to these matters and submit recommendations to the Council.

38. *Committee on Local and Student Branches.* Chairman Little submitted a report reviewing the work of his committee during the last two years and including a number of problems with reference to which the Committee requested direction from the Council. Some of these problems came out of informal conferences of representatives of Student Branches held during the Atlanta meeting. A general discussion dealing particularly with Student Branches and student membership followed, after which the following actions were taken.

On motion of Little-Fischelis, it was decided that provision will be made for representatives of Student Branches in attendance at annual meetings of the Association to discuss problems of interest to these Branches under the auspices of the Committee on Local and Student Branches.

The Committee on Local and Student Branches was instructed, on motion of Little-Swain, to study the question of the dues of members of the Student Branches and to report at the Richmond meeting. On motion of Little-Christensen, it was voted that an Association pin or button be presented to each member of the Student Branches.

39. *Committee on Social and Economic Relations.* Chairman Fischelis requested instructions from the Council with respect to appearance at hearings on the National Health Bill, S. 1620.

After a general discussion it was moved by DuMez, seconded by Costello, that the Association be represented at the hearings by the Chairman of the Committee and that Chairman Fischelis be requested to present a statement with respect to this measure, the statement to be submitted in advance to the Council for approval. The motion was carried.

40. *Pharmacy Exhibit in the Rosenwald Museum in Chicago.* H. C. Christensen submitted a lengthy verbal report covering the plans so far made to equip and install the Pharmacy Exhibit, in which will be placed most of the material exhibited at the Century of Progress. Plans were submitted showing the location and size of the space allotted to the exhibit and its relation to the space to be occupied by the Medical and Dental Exhibits, and the equipment so far decided upon. Mr. Christensen gave information in response to questions about the probable cost of the exhibit and conditions of ownership and maintenance.

After the proposal was generally discussed, it was voted on motion of Swain-Jenkins, that not more than \$1000.00 be appropriated to meet such bills as are now due or due on January 15, 1940, and that Mr. Christensen and the Secretary be instructed to obtain full particulars from officials of the Rosenwald Museum about the conditions of occupancy of the space allotted to the Pharmacy Exhibit, about the ownership of the exhibit and about any obligation

the ASSOCIATION in respect to the exhibit and for the future.

41. *Committee on National Formulary.* The Secretary reported that Chairman Gathercoal requested him to submit the following matters to the Council:

1. The Committee on National Formulary recommended to the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION an interim revision of the monograph for Liquor Antisepticus, N. F. The proposed Interim Revision Announcement as submitted by the Committee on N. F. was read in full and after a thorough discussion of the facts, it was moved by Swain, seconded by Jenkins, that the Council approve the recommendation of the Committee and that the revised revision become official on July 1, 1940. The motion was carried.

2. A proposed plan under which the ASSOCIATION would undertake to supervise a program of research covering chemical, pharmacological and clinical studies of the Viburnum barks under grants to be made available to the ASSOCIATION. After a careful consideration of all the information submitted, it was moved by Fischelis, seconded by Jenkins, that the AMERICAN PHARMACEUTICAL ASSOCIATION declines to undertake the supervision of the Viburnum Research Project. The motion was carried.

On motion of DuMez-Swain, it was voted to refer to a special committee consisting of Jenkins, Little and Kelly, the matter of studying the committees dealing with the direction of the Laboratory and of Research with the view of determining how the overlapping in work can be eliminated and the procedure simplified, and all questions relating to the maintenance of the A. PH. A. Laboratory.

3. All of the members of the Committee on National Formulary have not yet presented their nominees for their respective subcommittees; however, several of these lists of nominees are now available; as these subcommittees wish to become active and consider certain items for N. F. VII, the Chairman of the N. F. Committee recommends to the Council that the matter of approval of the nominees as offered be considered by the Council.

It is of interest to note that these nominees are widely scattered over the United States, that they are representative of the various phases of Pharmacy and that they include some very prominent names. As other members of the N. F. Committee report their lists of nominees, they will be submitted to the Council.

No. 1. *Subcommittee on Pharmacognosy*, E. H. Wirth, Chairman; Herber W. Youngken, Massachusetts College of Pharmacy, Boston; Earl B. Fischer, University of Minnesota, College of Pharmacy, Minneapolis; James M. Dill, University of Washington, College of Pharmacy, Seattle; L. David Hiner, S. Dakota State College, Brookings, S. Dak.; Robert W. Elich, Retail Pharmacist, 5943 N. Drake Ave., Chicago.

No. 2. *Subcommittee on Chemicals*, Glenn L. Jenkins, Chairman; Carl J. Klemme, Purdue University, Lafayette, Ind.; Joseph Rosin, Merck and Co., Inc., Rahway, N. J.; John F. Ross, Mallinckrodt Chemical Works, St. Louis, Mo.; Frank Moudry, The Apothecary Shop, 5th & St. Peter, St. Paul; E. V. Lynn, Massachusetts College of Pharmacy, Boston.

No. 4. *Subcommittee on Extractive Preparations*, J. B. Fullerton, Chairman; William J. Husa, University of Florida, College of Pharmacy, Gainesville; Justin L. Powers, University of Michigan, College of Pharmacy, Ann Arbor; D. M. Copley, Norwich Pharmacal Company, Norwich, N. Y.; H. A. Langenhan, 5226 Nineteenth Ave., N. E., Seattle.

No. 5. *Subcommittee on Solid Preparations for Internal Use*, A. B. Nichols, Chairman; Charles F. Lanwermyer, Abbott Laboratories, Chicago; Marvin J. Andrews, University of Maryland, Baltimore; Paul Wilcox, Sharp & Dohme Laboratories, Glenside, Pa.

No. 6. *Subcommittee on External Preparations*, H. A. K. Whitney, Chairman; John E. O'Brien, Retail Pharmacist, 1700 Douglas St., Omaha; George W. Fiero, University of Buffalo, Department of Materia Medica, Buffalo; Gordon A. Bergy, West Virginia University, School of Pharmacy, Morgantown; Francis E. Bibbins, 150 W. 64th St., Box 728B, Indianapolis.

No. 7. *Subcommittee on Bacteriological and Biological Preparations*, Richard A. Deno, Chairman; Malcolm H. Soule, Hygienic Laboratory, University of Michigan, Ann Arbor; W. P. Briggs, The Norwich Pharmacal Company, Norwich, N. Y.; Louis Gershenfeld, Philadelphia College of Pharmacy, Philadelphia; Esther Meyer, University of Illinois, College of Pharmacy, Chicago; Attilio R. Granito, 95 Main St., Hackensack.

No. 10. *Subcommittee on Nomenclature*, C. O. Lee, Chairman; H. C. Muldoon, Duquesne University, Pittsburgh; H. W. Youngken, Massachusetts College of Pharmacy, Boston; L. M. Parks, University of Wisconsin, School of Pharmacy, Madison; Max N. Lemberger, Wells Building, Milwaukee, Wis.

On motion Little-Fischelis, it was voted to elect as members of the respective Subcommittees named, the nominees submitted above.

42. *Election of Members.* On motion of Little-Jenkins, the following applicants were elected members of the ASSOCIATION:

Nos. 60, William Dunlop, 3437 Mt. Vernon St., Philadelphia, Pa.; 61, Horace L. Alexander, Main St., Wilmore, Ky.; 62, Mary Jo Brown, 219 E. Chestnut St., Louisville, Ky.; 63, Audra M. Elam, 219 E. Chestnut St., Louisville, Ky.; 64, Harry Bruce Ellis, 631 S. Second, Louisville, Ky.; 65, Carl J. Lintner, 1008 S. 34th St., Louisville, Ky.; 66, Albert R. Douglas, 100 Main St., Bowling Green, Ky.; 67, Charles E. Hamilton, 129 E. Gray, Louisville, Ky.; 68, E. Albert Harding, Cannelton, Ind.; 69, William W. Head, Jr., 6th & Madison, La Grange, Ky.; 70, William Milton Huffman, 209 S.

Hellier St., Pikeville, Ky.; 71, Charles T. Lesshafft, Jr., 4104 Michigan, Louisville, Ky.; 72, Mildred Ann Moore, Mortons Gap, Ky.; 73, Robert C. Russell, 129 E. Gray #7, Louisville, Ky.; 74, DeWitt Slaughter, 290 Lexington St., Versailles, Ky.; 75, Austin M. Johnston, 139 Chenango St., Binghamton, N. Y.; 76, E. J. Hasenmiller, 2305 N. 72nd St., Wauwatosa, Wis.; 77, Louis Greengard, 717 N. Grand Blvd., St. Louis, Mo.; 78, Amos Blaine Colby, Mondovi, Wis.; 79, James C. H. Russell, 3207 Wright Ave., Racine, Wis.; 80, Celesta A. Meyer, 220 Lake Lawn, Madison, Wis.; 81, Maurice B. Rudnick, 11421 S. Michigan Ave., Chicago, Ill.; 82, Lester August Feiertag, 3119 N. 33d St., Milwaukee, Wis.; 83, Sister Gladys Robinson, 2224 W. Kilbourn Ave., Milwaukee, Wis.; 84, Harry S. Eizen, 1232 W. Reservoir Ave., Milwaukee, Wis.; 85, Norman Moses Gitamer, 1030 4th St., S. W. Washington, D. C.; 86, Seymour Adler, 811 Upshur St., Washington, D. C.; 87, Ernest Joseph Simnaecher, 4608 Harmon Ave., Austin, Tex.; 88, Abe Humbert Luicks, 343 Vernon Ave., Brooklyn, N. Y.; 89, Carl Whorton, Whorton Pharmaceal Co., Gadsden, Ala.; 90, Herbert M. Abbitt, 238 N. Main St., Farmville, Va.; 91, Thomas Reid Rand, Jr., 122 E. Whitaker Mill Rd., Raleigh, N. Car.; 92, Alexander John Cieciwa, 4350 S. Whipple St., Chicago, Ill.; 93, Glenn Hopkins, West Oklahoma Charity Hospital, Clinton, Okla.; 94, Willey M. Moody, 100 S. Second St., San Jose, Calif.; 95, Malcolm S. Trupp, St. Louis College of Pharmacy, St. Louis, Mo.; 96, George J. Schultz, 1869 48th St. Brooklyn, N. Y.; 97, Edward H. Bloom, 129, W. Brown St., Milwaukee, Wis.; 98, Paul C. Larnce, 422 Hicks Bldg., San Antonio, Tex.; 99, Vernon R. Watson, P. O. Box 597, Eidenburg, Tex.; 100, J. Leon Kahn, 3180 Westover Drive, S. E., Washington, D. C.; 101, Harold V. Darnell, 710 Test Bldg., Indianapolis, Ind.; 102, Jack D. Cartwright, 483 Littleton St., W. Lafayette, Ind.; 103, Zalmon I. Blachman, 509 London St., Portsmouth, Va.; 104, Kenneth P. DuBois, 512 N. Salisbury, W. Lafayette, Ind.; 105, Elmer W. Rebol, 217 Sylvia, W. Lafayette, Ind.; 106, Ivan J. Klingaman, Cudahy Packing Co., Chicago, Ill.; 107, Elton S. Cook, 6616 Beechmont Ave., Cincinnati, O.; 108, Lowell H. Ruff, 224 W. Woodruff Ave., Columbus, O.; 109, Chester W. McClintoek, 232 Glenmout Ave., Columbus, O.; 110, Eugene L. Kammernan, 825 S. 59th St., Philadelphia, Pa.; 111, Stanton J. Hall, Medical & Dental Bldg., Everett, Wash.; 112, Emory W. Thurston, 1207 S. Vermont Ave., Los Angeles, Calif.; 113, Abraham M. Butnick, 12109 St. Clair Ave., Cleveland, O.; 114, John C. Hopkins, Hopkins Pharmacy, East Radford, Va.; 115, Samuel B. Zuccaro, 613 Hill St., Ann Arbor, Mich.; 116, Kenneth W. MeCrea, 1850 E. 85th St., Cleveland, O.; 117, William K. Edmiston, Box 697, University, Miss.

43. *Committee on Tenure of Office and Retirement Provisions.* Chairman Hilton reported that Dr. Fischelis had found it impossible to serve as Chairman of this Committee and that C. W. Holton had

been appointed as Chairman in place of R. I. Fischelis, resigned. The appointment was approved on motion of Kelly-Swain.

44. *Committee on U. S. P.* The following letter from Chairman Wirth was read:

"After considerable study the Committee on U. S. Pharmacopœia desires to submit the two following recommendations for your consideration:

The Committee on U. S. Pharmacopœia of the AMERICAN PHARMACEUTICAL ASSOCIATION recommends to the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION that it in turn recommend to the Board of Trustees of the United States Pharmacopœia that it give serious consideration to the matter of adequate publicity (1) of proposed changes of preparations and standards, (2) of new descriptions and standards and (3) of comments and criticisms of such changes with especial reference to the method of making such information public in ample time to allow thorough consideration of all details involved. It is further recommended that the Board of Trustees give consideration to the establishment of a Bulletin for this purpose.

The Committee on U. S. Pharmacopœia of the AMERICAN PHARMACEUTICAL ASSOCIATION recommends to the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION that it, in turn, recommend to the Board of Trustees of the United States Pharmacopœia that the Board prepare and present to the 1940 Pharmacopœial Convention an amendment to Chapter V of the By-Laws to the effect that any member elected to the Committee of Revision who does not satisfactorily perform the duties for which he has been selected or who finds himself unable to actively coöperate in revision work may be removed by the Board of Trustees or the Executive Committee of the Committee of Revision and a successor elected as provided in Chapter V, Article VII of the By-Laws."

The recommendations were approved on motion of Jenkins-Fischelis. The meeting adjourned at 10:45 P.M.

E. F. KELLY, *Secretary*

COUNCIL LETTER NO. 5

DECEMBER 30, 1939

To the Members of the Council:

(*Motion No. 5*) It is moved by Kelly that the minutes of the Second Meeting of the Council as given in Council Letter No. 4 be approved.

45. *Headquarters for the 1940 Meeting.* The Local Committee, after conferring with President DuMez, Secretary Kelly and Local Secretary Bird, recommended that the Hotel Jefferson be selected as the Headquarters for the Richmond meeting.

(*Motion No. 6*) It is moved by Kelly that the Hotel Jefferson, Richmond, Va., be selected as the Headquarters for the 1940 meeting.

46. *Budget for 1940.* Chairman Swain of the Committee on Finance submits the following proposed budget for 1940 which was prepared by the

Secretary and approved by the Committee on Finance:

Estimated Receipts:

Dues.....	\$15,500.00
JOURNAL & Abstracts and Miscel. Publications.....	13,000.00
National Formulary and Bulletins...	14,860.00
Recipe Book.....	4,308.00
Maintenance Fund:	
Laboratory.....	\$15,000.00
Library.....	2,000.00
Special Research.....	1,000.00
Publication.....	15,000.00
Research Fund.....	3,000.00
U. S. P. Grant for Color Work.....	750.00
	<u>\$84,418.00</u>

General Expenses:

1 Salaries.....	\$10,360.00
2 Maintenance of Building.....	4,200.00
3 Telegraph & Telephone.....	300.00
4 Clerical Expenses.....	1,800.00
5 Printing, Postage and Stationery	900.00
6 Office Supplies.....	300.00
7 Traveling Expenses.....	750.00
8 Premium on Bonds.....	50.00
9 Auditing.....	75.00
10 Certificates.....	25.00
11 Miscellaneous.....	150.00
12 Scientific Section.....	25.00
13 Section on Education & Legisla- tion.....	25.00
14 Section on Practical Pharmacy & Dispensing and Sub-section on Hospital Pharmacy.....	50.50
15 Section on Pharmaceutical Eco- nomics.....	25.00
16 Section on Historical Pharmacy	25.00
17 Committee on Proprietary Medi- cines.....	50.00
18 Committee on Local and Stud- ent Branches.....	50.00
19 Committee on Membership.....	1,000.00
20 Committee on Pharmacy Laws..	50.00
21 Committee on Syllabus.....	50.00
22 Committee on Pharmacy Week.	500.00
23 Committee on Emblem,.....	50.00
24 Committee on Dental Pharmacy	50.00
25 Inter-Society Color Council.....	25.00
26 Committee on Social and Eco- nomic Relations.....	50.00
27 Library	
(a) Salary.....	\$1,200.00
(b) Subscriptions, Books, Sup- plies, etc....	800.00
28 American Council on Pharma- ceutical Education.....	200.00
29 Exhibits (including Chicago ex- hibit).....	1,250.00

30 A. PH. A. Laboratory and Re-
search

(a) Preparation of Rooms.....	\$ 200.00
(b) Furniture.....	250.00
(c) Repairs and Replace- ments.....	100.00
(d) Permanent Apparatus.	800.00
(e) Salaries.....	12,040.00
(f) Laboratory Supplies...	1,000.00
(g) Office Supplies	250.00
(h) Traveling Ex- penses.....	900.00
(i) Miscellaneous	900.00
(j) A. PH. A. Grants	3,000.00
(k) Special Re- search.....	1,000.00
(l) Honorarium .	1,000.00
(m) Unappropri- ated.....	1,310.00
	<u>22,750.00</u>
	\$47,135.00

*Open Accounts:*31 JOURNAL—Scientific Edition (4000 copies—
96 pages and cover)

(a) Printing and Binding....	\$ 9,000.00
(b) Photos and Engraving.	500.00
(c) Salary.....	2,600.00
(d) Abstracting..	1,000.00
(e) Postage, office supplies, etc.....	125.00
(f) Travel.....	50.00
(g) Miscellaneous	100.00
	<u>13,375.00</u>

32 JOURNAL—Practical Pharmacy Edition (15,-
000 copies—48 pages and cover)

(a) Printing and Binding....	\$ 9,000.00
(b) Salary.....	2,500.00
(c) Clerical Ex- penses.....	1,700.00
(d) Traveling....	1,000.00
(e) Postage, Tele- grams, etc.	200.00
(f) Office Supplies	150.00
(g) Incidentals (cuts, etc.).	450.00
	<u>15,000.00</u>

33 National Formulary:

(a) Clerical.....	\$ 500.00
(b) Bulletins and Letters....	250.00

(c) Office Supplies	150.00	
(d) Chairman's Travel Expense.....	300.00	
(e) Committee Meeting Expense...	500.00	
(f) Printing and Binding....	2,100.00	
(g) Bulletins.....	500.00	
(h) Research (see Laboratory Account \$3000)		
(i) Salaries.....	2,500.00	6,800.00
<hr/>		
34 Recipe Book:		
(a) Revision.....	\$ 300.00	
(b) Binding.....	600.00	
(c) Advertising...	500.00	1,400.00
<hr/>		
Total.....		83,710.00
Less Unappropriated Balance.....		1,310.00
<hr/>		
Total Appropriation.....		\$82,400.00

The proposed budgets of expenses for the Scientific and Practical Pharmacy Editions of the JOURNAL are based on definite quotations (some of which were completed to-day) as to cost, but on estimates as to the number to be distributed, and they may have to be modified. It will be noted that the estimate of receipts from the JOURNAL remains the same as for 1939, although it is expected that they will be higher.

(*Motion No. 7*) It is moved by Swain that the proposed budget for 1940 be approved as submitted. A vote is called for at this time but if there is objection or additional information is desired by any member of the Council, it will be considered as tentative.

47. *Selection of Auditor.* The Committee on Finance recommends the employment of W. A. Johnson to audit the accounts of the ASSOCIATION for 1939, in accordance with Article VIII of Chapter IV of the By-Laws. Mr. Johnson has audited the accounts since 1922 and the appropriation for the audit has been \$75.00 for each year.

(*Motion No. 8*) It is moved by Swain that W. A. Johnson, Baltimore, Md., be selected to audit the accounts of the ASSOCIATION for 1939 at a cost of \$75.00.

48. *Election of Members.* The following applications, properly endorsed, accompanied with the first year's dues, and recommended by two members of the ASSOCIATION, have been received:

Nos. 118, Frank William Conti, 273 Dahill Rd., Brooklyn, N. Y.; 119, Carl E. Green, 147 Cedar Drive, Auburn, Ala.; 120, Dawson Waits, 174 W. Glenn Ave., Auburn, Ala.; 121, Thomas L. Moore, 166 Louiselle St., Mobile, Ala.; 122, Jep P. Daulton, Wittel Dormitory, Auburn, Ala.; 123, E. W. Schoeffel, 535 N. Dearborn St., Chicago, Ill.; 124, Hugh H. Hanson, 1906 Guadalupe, Austin, Tex.; 125,

Alphone Poklis, Rt. 10, Box 114, Sparrows Point Md.; 126, Charles A. Iraci, 5444—101st St Corona, N. Y.; 127, John R. Stockton, 2512¹/₂ Seton Ave., Austin, Tex.; 128, Virginia R. Kobylanski, 4481 Broadway, Gary, Ind.; 129, Solomon M Berman, 202 Potters Rd., Buffalo, N. Y.; 130, E. W. Weed, G. F. Harvey Co., Saratoga Springs, N. Y. 131, Arthur J. Gibson, Health Service Pharmacy Ann Arbor, Mich.; 132, Lorena Shepherd, Case Jones Drug Store, Lexington, Va.; 133, A. W. Harrell, Jr., Quantico Drug Co., Quantico, Va.; 134 Aaron Finn, 5039 N. Harding Ave., Chicago, Ill. 135, Enrique I. Moscoso, 411 Winchell House, W Ann Arbor, Mich.; 136, Charles J. Heimerzheim 188—11—91st Ave., Hollis, L. I., N. Y.; 137, Lawrence H. Dalman, 263 Cumberland St., Brooklyn N. Y.; 138, Ruth L. Smock, 2400 Birch St., Easton Pa.; 139, Leon Hale, Box 246, Anahuac, Texas 140, Ignatius J. Bellafiore, 1655—76th St., Brooklyn N. Y.; 141, Sister Mary Adele Murphy, 218 Ston St., Watertown, N. Y.; 142, Thomas D. Cook, 950 E. 59th St., Chicago, Ill.; 143, Thomas W. Peyton 1009 Highland Ave., Shreveport, La.; 144, Norvil W. Lewis, Jr., 1701 B St., Pullman, Wash.; 145, Robert A. Nixon, Jr., 505 Colorado St., Pullman, Wash.; 146, L. B. Leisher, 505 Colorado, Pullman, Wash.; 147, P. A. Sammons, Box 621, College Sta., Pullman, Wash.; 148, Wendell O. Schell, 419 N. Hudson Ave., Pasadena, Calif.; 149, Shig J. Masuoka, 1016¹/₂ S. Catalina St., Los Angeles, Calif.; 150, Beverly D. Taylor, 668 W. 28th St., Los Angeles, Calif.; 151, Harold R. Bowers, 3676 Fairway Blvd., Los Angeles, Calif.; 152, Leonard E. Morrow, 2638 Portland St., Los Angeles, Calif.; 153, Yoshiteru F. Koyama, 1123 S. Hobart Blvd., Los Angeles, Calif.; 154, Wm. A. Wright, Tecumseh, Mich.; 155, Clark Saleski, 711 N. 4th Ave., Big Rapids, Mich.; 156, Robert R. Fonda, Ferris Institute, Big Rapids, Mich.; 157, Robert J. Trommer, Ferris Institute, Big Rapids, Mich.; 158, Joan Olsen, Ferris Institute, Big Rapids, Mich.

(*Motion No. 9*) Vote on applications for membership in the ASSOCIATION.

E. F. KELLY, Secretary

The Nation's First Census of Housing

In conjunction with the 16th decennial census, it was intended to develop a comprehensive picture of housing and home ownership in the United States. Housing experts point out that information gathered will be of great value in the determination of future housing policies. Data is requested in a schedule of thirty-one questions bearing on the type of structure, equipment and ownership for each of the approximately 35,000,000 dwellings throughout the country.

IN THE NEWS

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The Department of Pharmacy of the West China University has been very fortunate in securing a research professorship from the British Boxer Indemnity Administration for work in the Division of Chinese Drug Research. Dr. T. H. Tang who has been elected to this professorship has had extensive and valuable experience in scientific research. For the last nine years he has been a member of the scientific staff of Shangtung University.

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Among the visitors at the AMERICAN INSTITUTE OF PHARMACY, during January, were the following: Leonard Cadel, New York City; E. S. Diowa, White River Jet., Vt.; Fred R. Lufkin, Elgin, Ill.; Mr. and Mrs. Charles Eukorn, Brooklyn, N. Y.; Charles B. Phipard, Jr., Arlington, Va.; Churchill O. Phipard, Huntington, L. I., N. Y.; and Sam Bernstein, Washington, D. C.

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Among the visitors at the AMERICAN INSTITUTE OF PHARMACY, during January, were the following: Leonard Cadell, New York City; E. S. Diowa, White River Jct., Vt.; Fred R. Lufkin, Elgin, Ill.; Mr. and Mrs. Charles Bukorn, Brooklyn, N. Y.; Charles B. Phipard, Jr., Arlington, Va.; Churchill O. Phipard, Huntington, L. I., N. Y.; and Sam Bernstein, Washington, D. C.

Almost a hundred practicing pharmacists attended the three-day postgraduate Seminar in Modern Pharmaceutical Practice at the Philadelphia College of Pharmacy and Science on January 29th, 30th and 31st. This session of lectures and demonstrations on the latest in professional and scientific procedures and technique was presented by twenty of the members of the faculty who devoted considerable time to exposition of the latest in practical and technical problems and their solutions.

Dr. Earl R. Serles, head of the South Dakota State College Division of Pharmacy, has been elected dean of the College of Pharmacy of the University of Illinois, to take effect as of July 1st. Dean Serles, a native of South Dakota, is recognized as an educational pioneer, and druggists of Illinois will welcome him into their midst. Frontispiece and sketch of Dr. Serles appeared in the A. PH. A. JOURNAL on pages 824-825, October 1938.

Phi Delta Chi, National Professional Fraternity of Pharmacy and Chemistry, entered the year 1940 with a report of the best conditions existing in its chapters in many years, according to Grand President Howard L. Reed, of Boston, Massachusetts.

According to Mr. Reed the Fraternity is entering upon a period which it expects to make the most outstanding in its history with a program for the next ten years definitely "streamlined" to be in step with modern collegiate and Fraternity conditions.

At present Grand President is Howard L. Reed, Assistant Professor of Biology and Pharmacology, Massachusetts College of Pharmacy, Boston, Massachusetts; and Secretary-Editor is Rand P. Hollenback, Printer and Publisher, Columbus, Ohio.

Following a custom established nineteen years ago, the Philadelphia College of Pharmacy and Science is pleased to announce a series of Popular Science Talks for the 1940 season. These lectures, delivered by members of the faculty are designed especially to combine scientific accuracy and completeness with a minimum of technical terms. The list of lectures and lecturers is as follows:

February 7th, "Fire! Fire! Fire!," Freeman P. Stroup.

February 14, "Stoking the Furnace," Horatio C. Wood.

February 21, "Ultraviolet Light as a Sanitary Aid," Louis Gershenfeld.

February 28, "What's New," John E. Kramer.

March 6, "The Test Tube and Beaker Sleuth," Joseph W. E. Harrison.

March 13, "Within the Atom," Donald P. Le-Galley.

March 20, "Proteins—The Building Blocks of Our Body Structure," Linwood F. Tice.

March 27, "The Old Fashioned Herb Garden," William J. Stoneback.

April 3, "Colors by Nature, Nature of Colors," George Rosengarten.

April 10, "Chromato-Therapology (in English: Color—a Drug)," Ivor Griffith.

Ernst Bischoff Company, Inc., Ivoryton, Conn., announce the establishment of a fund for dermatological research at Tuft's College Medical School, Boston, Mass.

The following District meetings have been arranged: No. 2, Baltimore, Md., March 4th and 5th; No. 4, Columbus, Ohio, March 18th and 19th at the Ohio State University; No. 6, San Antonio, Tex., February 7th and 8th, Gunter Hotel.

The following appointments to State Boards of Pharmacy have been made by the respective Governors: Burton K. Murdock, Maine; Frank East, Massachusetts; James Denny, Missouri; Charles Saultz, Nebraska; and John R. William, Pennsylvania.

Dean H. Evert Kendig, of Temple University, Philadelphia, has announced a Pharmacy Seminar under the auspices of the Lackawanna County Pharmaceutical Association, a series of lectures and discussions by members of the faculty of the School of Pharmacy of Temple University. These began January 19th and will be continued until March, at the Chamber of Commerce Building, Scranton, Pa.

Dr. James C. Munch opened the Seminar; Prof. Herbert M. Cobe followed; then, Prof. Arthur I. James and Prof. Harry W. Mantz; next, Prof. Howard Graham will officiate; and on March 15th Dr. Robert L. Swain and Carson P. Frailey, Esq.

Latest developments in the field of pharmacy are being stressed in the Seminar, which is designed to keep Temple pharmacy graduates abreast of the times in their profession.

The meeting of District No. 1, N. A. B. P. and A. A. C. P., comprising the New England State will be held this year in New Haven at the Connecticut College of Pharmacy on Tuesday, April 1st and 2nd. Dean Newton of Massachusetts is chairman for the college group and Mr. Shangrow of Vermont is chairman of the boards.

Dr. Henry S. Johnson is chairman of the Program Committee and Dr. H. P. Beirne, chairman of the Entertainment Committee. In addition to papers to be presented Prof. C. C. Furnas of the chemistry department at Yale, author of "The Next Hundred Years," best seller of a few years ago, will speak before the meeting and a dinner will be tendered visiting delegates by the college on Monday evening.

The Carrell-Lindberg artificial heart, which was operated by Ciba Pharmaceutical Products, Inc., at the New York World's Fair, for the benefit of physicians and the public, is now installed in the laboratories recently completed by the firm in Summit, N. J. and will be on view to all visiting members of the medical profession. Plans are under way to install the presentation on "The Glands of Internal Secretion" in the Hall of Public Health at the American Museum of Natural History, New York City.

Thanks are extended for the Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures and condition of the Institution for the year ended June 30, 1938. Publication 3491, U. S. Government Printing Office, Washington, 1939. For sale by the Superintendent of Documents, Washington, D. C. Price, \$1.50.

Letter of transmittal to the Congress by C. G. Abbot, Secretary. Matters of general interest—the Smithsonian Gallery of Art, the radio program, Smithsonian Institution exhibit at the Paris International Exposition, 1937, etc. There are quite a number of plates—black widow spider, valley of New Mexico, valiant, Roman orient, ancient Chinese capital, limits of human flight, etc.

The officers and members of the Institution are given and regents of the Institution; the Executive Committee; the division of Plants; the division of Medicine; division of History; section of Photography; National Gallery of Art, Freer Art Gallery, Bureau of American Entomology, International Exchange, National Zoological Park, Astrophysical Observatory, division of Radiation and Organisms.

Governor Johnson, of Mississippi, has appointed the following to serve on the State Board of Pharmacy: Marshall Smith, Hattiesburg; S. F. McDuffie, Nettleton; C. L. Marron, Fayette; and Chester E. Jones, Jackson.

Minimum Pharmaceutical Equipment

After checking the minimum equipment of all drug stores over the state for over a period of a year, the following figures have been reached—based on a general average of 894 drug stores checked:

Item	Per Cent	
	Per Cent Having	Not Having
U. S. P. (current revision)	66%	34%
N. F. (current revision)	65%	35%
Standard Commentary on U. S. P. and N. F.	73%	27%
Standard Equipment	65%	35%
Balances and Weights	91%	9%
Record Books:		
Exempt and Poison Register	90%	10%
Cabinets: Narcotic, Poison, Refrigeration	93%	7%
Typewriter and Duplicate Numbering Machine	55%	45%
Prescription File and Counter	98%	2%
Adequate Stock of Drugs	97%	3%
Miscellaneous Equipment	99.3%	0.7%
Poison Sales (having) over 100 signatures per year—59%		
Poison Sales (not having) under 100 signatures per year—41%		

The Kansas Pharmaceutical News

Dean L. D. Havenhill, University of Kansas, who recently met with an automobile accident, is recovering nicely and has been able to leave the hospital. No internal injuries were sustained.

Retail pharmacist, J. Harry Beckerman, of Brooklyn, N. Y., and Miss Gertrude Bender of the same city, will be married on February 10th. Mr. Beckerman is a graduate of Brooklyn College of Pharmacy and St. Johns University.

Prof. and Mrs. Charles O. Wilson, Washington, D. C., announce the arrival of Charles Owens Wilson, 3rd, on January 14th. Professor Wilson is connected with George Washington University.

BOOK REVIEWS

Lobscows, by IVOR GRIFFITH, from an Editor's Kitchen. The Preface gives the understanding that it is a clean-up of the Editor as are the Lobscows of the Welsh home—the merry dish which is described by the author as a compromise between soup and stew, but better than both; it is the cook's delight and a thing of joy to the ultimate consumer, of which the author is one. The reader will find the book interesting and useful.

The author is well known and the title applies to him, because he is Dean of the Philadelphia College of Pharmacy and Science, Editor of the *American Journal of Pharmacy*, Professor of Organic Chemistry, Wagner Free Institute of Chemistry; Director of Laboratories, Stetson Hospital, John B. Stetson Company; Director of Research, McNeil Laboratories, Inc., Philadelphia. The book is dedicated to Carolyn who was a member of a happy family and who gave joy and delight to friends during a period of happy years.

The Preface gives an understanding of a well-chosen title, many varieties of writings, addresses, social chats and conversations make up the book of more than 500 pages. It entertains and informs and shows the busy life of a writer who seeks out information for students and readers. The Table of Contents includes about sixty subjects which are well arranged and cover thoughts on art and science, general literature, lectures and editorials. The book is well bound and printed by International Printing Co., Philadelphia, Pa. Price, \$3.00.—E. G. E.

Treatment in General Practice. Published by Little, Brown & Co., Boston. Price, \$7.50, in two volumes.

Reginald Fitz, in writing the Preface of the First American Edition (earlier editions were published in England), refers to the interesting experiment of

a series of articles on treatment by well-known clinical teachers, which resulted in two volumes; the first of about 250 pages dealt with the acute infectious diseases and the cardio-vascular disease; the second of about 425 pages with the treatment of more chronic conditions such as rheumatism and diseases of the nervous system, of the blood and blood-forming apparatus, of metabolism and of the kidney. Many physicians well and favorably known to medical practitioners contributed to the volumes. Quoting the Preface, Dr. Hugh Clegg, who is largely responsible for the plan, kept in mind two guiding principles, practicality and teaching.

It is pleasing to note that the contributors use official drugs and preparations and write their own prescriptions.—E. G. E.

OBITUARY

Charles T. Heller

Charles T. Heller, of St. Paul, Minn., passed away recently, following an attack of pneumonia, after a long and useful life in the service of his profession. Mr. Heller helped to organize the N. A. R. D., being one of the charter members, and served as its treasurer for a number of years. He was honored by the Association at its meeting in St. Paul last October.

Mr. Heller was active in the work of both city and state, having served as secretary of the State Board of Pharmacy and treasurer of the State Pharmaceutical Association. He was instrumental in the passage of early pharmacy laws in the state.

A son, Charles T. Heller, Jr., was associated with his father in business; and a daughter, Bessie, has attracted much attention for her mural paintings.

He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911.

Henry Thomas Hicks

On January 24th, Henry T. Hicks, of Raleigh, N. C., passed away. Born March 4, 1866, he was educated in the private schools and at the Raleigh Male Academy. He obtained his pharmacist's license in 1885 and a few years later entered Philadelphia College of Pharmacy, completing the course with high honors. For a time he worked in Carmichael's Pharmacy, Asheville, but returned to Raleigh to accept a position with James McKimmon. In 1893 he opened a retail drug store under the name of Snelling and Hicks.

Mr. Hicks joined the North Carolina Pharmaceutical Association in 1897 and became a Life Member in 1917. He held many offices in the organization, including that of local secretary in 1918 and president in 1902-1903. He also contributed a number of interesting and instructive papers and his services

have often been given in furthering legislative measures initiated by the Association. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1916.

On January 6, 1892, Mr. Hicks married Miss Snelling, who, with two sons, William S. and Harry T., survive.

A. B. Stevens

Prof. A. B. Stevens died January 24th at his home in Escondido, California, at the age of 86 years.

Alviso Burdett Stevens was born at Tyrone, Livingston County, Michigan, June 15, 1853, son of Harvey Root and Hannah Ann (Cole) Stevens. He was educated in the high schools of Byron and Escondido, Saginaw; entered the University of Michigan in 1873 and graduated with the degree of Pharmaceutical Chemist in 1875. In 1876 he was married to Amoretta Louise Search and to them one son, Don Search, was born. After serving several years both as an analytical chemist and prescriptive pharmacist in Detroit, Stevens taught pharmacy to the students at the Detroit College of Medicine from 1879 to 1882. In 1886 he was called to the University of Michigan as Instructor in Pharmacology, advanced to Lecturer in 1890, to Assistant Professor of Pharmacy in 1892 and to Junior Professor of Pharmacy in 1906. The years 1903 to 1905 were spent in foreign travel and study at the end of which time he received the degree of Doctor of Philosophy at the University of Berne. Returning to his teaching at Ann Arbor, he was made Professor of Pharmacy in 1910, Acting Dean in 1912 during the temporary absence of Dean Schlotterbeck, and was made Dean after the death of Dr. Schlotterbeck in 1917. In February, 1918, Mrs. Stevens died in a California sanitarium after a lingering illness.

In June of 1919, having reached the retirement age of the Carnegie Foundation, he became Professor Emeritus, bade farewell to a host of friends and took up a new residence with his son in Escondido, California. During his 33 years at the university, Dr. Stevens made many contributions to Pharmacy, taking an active part in both state and national activities. He was President of the Detroit Pharmaceutical Society for the years 1884 and 1885; President of the Michigan State Pharmaceutical Association in 1893; First Vice-President of the AMERICAN PHARMACEUTICAL ASSOCIATION in 1890 and was made Honorary President in 1919. He was elected a member of the decennial Committee of Revision of the United States Pharmacopœia in 1906 and again in 1910; also a member of the 3rd and 4th revision committees of the National Formulary. He was the author of "Arithmetic of Pharmacy" in 1905, and "Manual of Pharmacy and Dispensing" in 1909.

Professor Stevens possessed a rare combination of character qualities which at once endeared him alike to students, faculty and all who were privileged to know him.—C. C. GLOVER.

GENERAL NOTICES

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Entered as second-class matter January 23, 1917, at the Post Office at Easton, Pa., under the act of March 3, 1879, as 24 times a year. Scientific Edition monthly on the fifth. Practical Pharmacy Edition monthly on the 20th. Acceptance for mailing at a special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 10, 1918.

business. The fact that defendants are physicians and medical organizations was not considered of significance because the Sherman Act prohibits "any person" from imposing restraints on trade.

It is expected that the case will be appealed to the U. S. Supreme Court for review and the final decision will be of importance to pharmacy as well as to the other professions.—E. F. K.

Dangerous Drugs

Requests have been received for information with respect to the responsibilities of retail pharmacists under the sections of the Federal Food, Drug and Cosmetic Act which relate directly to dangerous drugs, and the regulations promulgated thereunder. Each of these three sections will be considered separately.

Section 502 (j) of the Act reads as follows;

"A drug or device shall be deemed to be misbranded if it is dangerous to health when used in the dosage, or with the frequency or duration prescribed, recommended or suggested in the labeling thereof" and it should be remembered that the term "labeling" means "all labels and other written, printed, or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such article."

This language means simply that pharmacists should not sell indiscriminately a drug which may be dangerous to the consumer under the conditions of usage directed on the labeling and that the decision is theirs.

Two classes of such drugs have been referred to by officials. First, drugs which are dangerous under any conditions of use such as dinitrophenol and which should not be sold under any conditions. Second, drugs which should not be indiscriminately sold but which may be safely used under the direction of those who are licensed by the state to prescribe them. These latter drugs should be furnished only on prescription and the Food and Drug Administration has designated as examples of drugs coming within this class, sulphanilamide and drug preparations containing it or related compounds, aminopyrine and drug preparations containing it, and cinchophen and neocinchophen and drug preparations containing them. The dangerous potentiali-

ties of these drugs and preparations when used without proper control and advice were pointed out to distributors and they are now labeled to be used only on prescription.

Section 502 (j) of the Act provides that a drug is misbranded unless its labeling bears adequate directions for use. Many drugs are intended by those who produce them to be used only on prescription and a regulation has been issued exempting the packages of such drugs from this requirement, since adequate directions will be furnished by the prescriber, provided the label bears the phrase, "Caution: to be used only by or on the prescription of a physician" and does not bear representations or suggestions about the conditions under which the drug is to be used, in wording likely to be understood by the ordinary individual. Such drugs should not be distributed indiscriminately by pharmacists and should be furnished only on prescription.

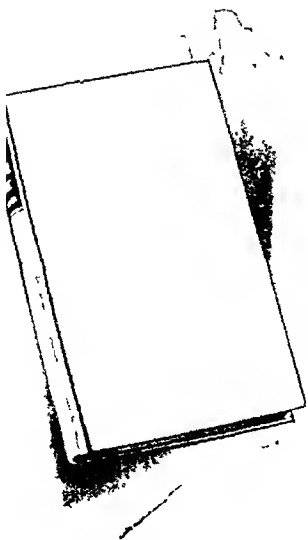
Officials have referred to reports that some manufacturers have attempted to evade the responsibility for placing adequate directions for use on non-dangerous drugs by labeling them with the cautionary statements mentioned above. The Chief of the Food and Drug Administration has publicly stated that this regulation will be abrogated or amended if it is so abused.

Section 301 (k) of the Act includes among the acts and the causing thereof, which are prohibited, "The alteration, mutilation, destruction, obliteration, or removal of the whole or any part of the labeling of, or the doing of any other act with respect to, a food, drug, device, or cosmetic, if such act is done while such article is held for sale after shipment in interstate commerce and results in such article being misbranded."

It has been held that the sale by a pharmacist of a drug which may be dangerous to the consumer, provided the drug has

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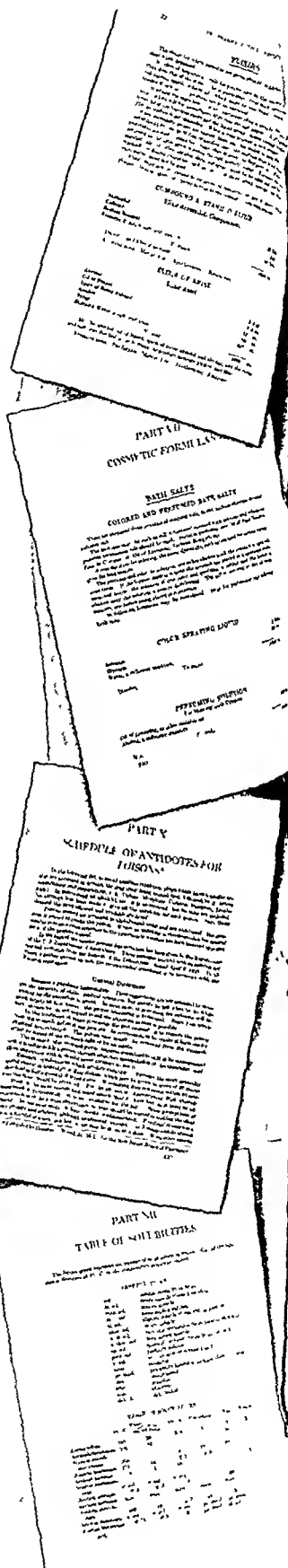
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been in interstate commerce at any time, is a violation of this Section since a dangerous drug is defined as misbranded under Section 502 (j) and since such a sale would be "the doing of any other act" mentioned in Section 301 (k) which resulted in such drug being misbranded. It is understood that this possibility applies particularly in those cases where pharmacists purchase drugs in bulk and repackage them under their own label without quoting in full the directions and warnings which were stated on the labeling of the original container.

It has been stated that the Food and Drug Administration will not undertake the policing of pharmacies in general, that the facilities for such policing are not now available to the Administration and that the Administration will not undertake to assume the duties and obligations of local authorities. It is pointed out, however, that the Federal Food, Drug and Cosmetic Act does "provide for the maintenance of supervision over goods which have once entered interstate commerce right down to the time of their consumption" and that the Food and Drug Administration will not ignore its responsibilities in respect to dangerous drugs or attempt to shift it to local authorities. It has been said that an investigation is being planned to determine whether rumors to the effect that dangerous drugs are being distributed indiscriminately in some sections are correct and that, if so, remedial measures will be undertaken by the administration where there is no other adequate control or where there is a disregard for the rights of the public, and that where this may be necessary the Courts will be asked for authority to proceed.

It seems evident that pharmacists will be held to be responsible under the Federal Act for the indiscriminate sale of dangerous drugs under the conditions mentioned above, in states where there are no provisions with respect to dangerous drugs similar to those in the Federal Act or in states where such provisions exist but are not enforced unless the Courts should hold otherwise.

There is a difference of opinion as to the decision of the Courts in such cases but

until such a discussion is rendered, pharmacists should remember that they are considered by the Federal authorities to be responsible.

And, apart from the law, pharmacists should scrupulously observe their professional obligation to protect the safety of those whom they serve.—E. F. K.

National First Aid Week

President Alfred C. Fritz, of the National Association of Retail Druggists, issued the official proclamation concerning the week. The text of the proclamation follows:

"Throughout the years, the druggists of this nation have rendered invaluable services to the public through their activities in the dissemination of information concerning the proper methods of rendering First Aid, and in making quickly and easily available the necessary requisites with which to care for emergencies, injuries and illnesses.

"It is but right that the public should be informed of these services, that it may better appreciate them. It is also pertinent that we, the druggists, continue our activities in the educational field.

"With these facts in mind, the National Association of Retail Druggists nineteen years ago established its Committee on National First Aid Week, assigned to it the duties of perpetuating interest in First Aid among druggists and laymen, and of assisting druggists in planning their part in this great program.

"Therefore, as President of the National Association of Retail Druggists, I now officially proclaim the week of May 19th to 25th as National First Aid Week. Every member of the N. A. R. D. is requested and urged to participate in the consummation of National First Aid Week to the full extent of his facilities—both in his store and in the community at large; to install window displays and counter displays during this period; and to increase his efforts to acquaint his patrons with the valuable professional services rendered them in handling these preparations."

Dean E. Miller, South Bend, Ind., is Chairman of the Committee.

Mme. Irene Joliot-Curie and her husband, Dr. Frederic Joliot, have been awarded the 1940 Barnard gold medal for meritorious service to science. They are co-workers in the Radium Institute of Paris and pioneers in the field of atom smashing. Mme. Joliot-Curie is the daughter of Mme. Marie Curie, co-discoverer with her husband of radium. The Barnard medal is bestowed every five years by Columbia University to persons selected by the National Academy of Sciences of the United States.

Richmond, Va., A. P. H. A. Convention City, May 5, 1940

Yellowing pages of history books will spring to life for members of the AMERICAN PHARMACEUTICAL ASSOCIATION when they visit Richmond, May 5th to 11th, for the annual meeting of their organization. Everyone knows the part Virginia played in the creation of these United States. The War between the States, during which the streets, the fields, the forests here were consecrated with the blood of valiant soldiers, also has filled countless volumes. But what is more important is the fact that so many shrines remain to-day for all to see—so many that only a few can be mentioned.

Nestling amid giant shade trees on one of Richmond's seven hills is the oldest church in the city—St. John's Episcopal—where Patrick Henry spoke those immortal words that hastened the Revolution and brought freedom to these shores—"Give me liberty or give me death." The oldest house in Richmond, erected about 1686, has been restored and is now the Edgar Allan Poe Shrine. It contains much Poe material and in the rear of this home, that time seems unable to destroy, is the beautiful "Enchanted Garden."



The White House of the Confederacy.

Richmond, the Capital, is in the center of things historic. Short distances away, and linked by smooth-paved highways, are famous battlefields; Colonial Williamsburg; Yorktown, where Cornwallis surrendered to Washington; Jamestown, site of the first permanent English settlement in America, and Petershurg, another old, picturesque Virginia city.

In spacious, ever-green Capitol Square is the magnificent Capital building designed by Thomas Jefferson after the Maison-Carrée at Nîmes, France. In the rotunda of this imposing structure is the Houdon statue of Washington—the only one in existence to-day for which the Father of the Country posed. It is considered the most valuable piece of marble in America. Nearby is a head of Lafayette, also by Houdon. In the Square itself are the equestrian statue of Washington, executed by Thomas Crawford and cast in Munich at a cost of \$100,000; the Governor's Mansion and many monuments to Virginia's famous sons.

Another building of which Richmond is particularly proud is the White House of the Confederacy, now the Confederate Museum, a treasure house of relics of the War between the States. It was there that President Jefferson Davis and his family lived during the entire period of the conflict. The Museum is in the center of the group of buildings of the Medical College of Virginia, the only medical college in the South that remained open during the entire period of the War between the States. Now nationally famous, but still growing in size and prestige, it has schools of pharmacy, medicine, dentistry and nursing.

The home of Chief Justice John Marshall, which he himself designed, still stands at Ninth and Marshall Streets. It is furnished with much of the original furniture. Valentine Museum, a charming old residence, in the same section of the city, contains a rare American Indian collection, a model of the recumbent statue of General Robert E. Lee and countless other items of widespread interest.

This touches only the surface of things on the "must-see" list for all who visit Richmond. Among others are Battle Abbey, with its magnificent Charles Hoffbauer murals of the four seasons of the Confederacy; the Virginia Museum of Fine Arts, containing the Henry P. Strause and John Barton Payne collections of paintings, prints and decorative arts; the beautiful, rolling campus of the University of Richmond; Monument Avenue, the residential thoroughfare lined with monuments to the leaders of the Confederacy; the Carillon, Virginia's memorial to her dead of the World War; the home of Robert E. Lee, commander-in-chief of the Confederate Armies.

The old charm of historic Williamsburg has been recaptured through the generosity of John D. Rockefeller, Jr. The Colonial Capital of Virginia appears the same to-day as it did during the infancy of the United States. Of special interest in Williamsburg are the College of William and Mary, second oldest in America; the Wren Building, oldest academic building; the Public Magazine, the arsenal in which were stored the arms and ammunition of the Virginia Colony; the Capitol, closely identified with the political life of Colonial Virginia; Raleigh Tavern, one of the nation's most historic taverns; the Wythe House, home of George Wythe, first professor of the first law course offered by an American college. It was in Wythe House that George Washington made his headquarters prior to the siege of Yorktown.

A few miles from Williamsburg is Jamestown, first permanent English settlement in the New World. It was there that the Susan Constant, the Goodspeed and the Discovery landed a handful of adventurers, under the command of Captain Christopher Newport. The first Anglican Church was built at Jamestown on the site which to-day is marked by the ruined tower of a later church, erected about 1676.

Also in Tidewater Virginia is historic Yorktown, the birthplace of the United States. It was there that Lord Cornwallis surrendered to Washington on October 19, 1781, bringing to an end the American Revolution. Buildings still standing include the Nelson House, where Cornwallis had his headquarters, and the Moore House, where representatives of Cornwallis and Washington met to agree on the terms of surrender.

A two-hour ride from Richmond will take visitors to Charlottesville, home of the University of Virginia; to Monticello, home of Thomas Jefferson and to famous Skyline Drive, which runs atop the oldest mountains in the world—Blue Ridge. Those ranges are particularly awe-inspiring in the spring when they appear to be awakening at the dawn of a new season.

Just outside Richmond are the battlefields where the Northern and Southern forces fought for months. The area has been restored by the National Park Service, so to-day an hour's leisurely motor trip is sufficient to see the fortifications that stand as monuments to the War between the States.

Many interesting historical places remain in Petersburg, the old-world atmosphere of which has been largely maintained in spite of its being a thoroughly modern and up-to-date city. Most notable of all points there is Blandford Cemetery, enclosing old Blandford Church. The church, an ancient colonial structure, has been restored and now is a Confederate memorial shrine used for special services.

St. Paul's Church, built in 1856, and Grace Church, begun in 1860, were the churches in which



The birthplaces of Patrick Henry and Henry Clay are just north of Richmond. Markers such as these are seen along Virginia's highway.

General Robert E. Lee worshipped during the siege. "Battersea," the Banister home, is one of the oldest and best-known of the beautiful Petersburg homes.

EDMOND BRILL, *Director of Publicity,*
Richmond Chamber of Commerce

COURTESY TOURS

ALL PEOPLE ATTENDING THE A. P. H. A. CONVENTION are urged to visit the historic spots of Richmond during free time. A number of Richmond citizens are offering the use of their automobiles for this purpose. Those who wish to take advantage of this opportunity *should sign the register which will be provided* at the information booth. There will be no charge for these tours.

National Dental Program

By George C. Schucks, Chairman

Series II

The following dental formulas are used to produce sedation and relieve pain. Bromides have long been used for sedation. The dentist has a wide choice of official bromides from which he may make a selection. The U. S. P. recognizes bromides of ammonium, calcium, sodium and potassium. In the National Formulary are bromides of lithium and strontium; Elixirs of Ammonium Bromide, Chloral and Potassium Bromide Co., Potassium Bromide, Sodium Bromide, Three Bromides, Five Bromides, Compound Effervescent Salt of Potassium Bromide, Syrup of Three Bromides, Tablets of Triple Bromides and of Sodium Bromide.

The formula for Troches of Ethyl Aminobenzoate has proved popular in many localities. There is no standard equipment for the extemporaneous preparation of troches. They are not difficult to make, however. The following method is satisfactory. After the troche mass is made it is rolled out as one would roll a pill mass. Measure two divisions on the pill tile for each troche and then flatten slightly by pressing rolled mass with a spatula and cut. These may be colored and flavored to suit. This medicated troche is also prescribed by physicians for throat irritation.

Dental Formulas

(a)	Metric	Apoth
R _x	Approx	Equivalents

*Pulv. Codem Sulf. 0.03 Gm gr 1/2

Ft caps dentur tales doses No. X

Sig. One every three or four hours with water

Note. Analgesic—Pain

*Narcotic prescriptions must conform to the regulations of the Harrison Narcotic Law

Average dose—1/2 grain Maximum dose—1 grain

Not as efficient as morphine but less habit forming and constipating

May be combined with barbitol to induce sleep in presence of pain

(b)	Metric	Apoth
R _x	Approx	Equivalents
Pulv. Sodii Bromidi	1 Gm	gr xv
Ft caps dentur tales doses	No. X	
Sig.	Contents of one capsule dissolved in half a glass of water	
Note.	Pre-operative and post-operative medication	

(c)	Metric	Apoth																							
R _x	Approx	Equivalents																							
Aethylis Aminobenzoatis	0.75 Gm	gr xiss																							
Vanillin	0.03 Gm	gr ss																							
Sucrosi	8.12 Gm	Pulv. Tragacanthæ	0.25 Gm	gr iv	Carmini	0.01 Gm	gr 1/6	Aq. Dest. q. s.			M			Ft. trochisci	No. XXX		Sig.	One dissolved on tongue to prevent gagging		Note.	Aethyl Aminobenzoate is benzocaine. Each troche contains 1 gr benzocaine. Used to relieve gagging and similar symptoms when taking impressions. Topical anesthetic on mucous membrane.			Local anesthetic	
Pulv. Tragacanthæ	0.25 Gm	gr iv																							
Carmini	0.01 Gm	gr 1/6																							
Aq. Dest. q. s.																									
M																									
Ft. trochisci	No. XXX																								
Sig.	One dissolved on tongue to prevent gagging																								
Note.	Aethyl Aminobenzoate is benzocaine. Each troche contains 1 gr benzocaine. Used to relieve gagging and similar symptoms when taking impressions. Topical anesthetic on mucous membrane.																								
	Local anesthetic																								

(d)	Metric	Apoth
R _x	Approx	Equivalents
Chlorobutanol	7.5 Gm	gr cavi
Oil of Clove, q. s. ad	30.0 cc	℥ i
M		
Sig.	Apply on pledget of cotton to cavity of tooth	
Note.	National Formulary title—Odontalgicum *	
	Local anesthetic for topical application. The technique of application remains the same as in the use of the essential oil.	
	*May be obtained by prescribing Odontalgicum N. F.	

The four formulas given for hypersensitive dentin are favored by many. The usual method of application is to dry the area, apply the medication on a pledget of cotton, and wait a minute or two before proceeding. One of these, containing ether, alcohol and thymol, is known as Hartman's Solution. It has proved efficient in some cases but does not represent specific treatment as was first thought.

The use of Ammoniacal Solution of Silver Nitrate to control caries and for hypersensitive dentin is an advance over a plain solution of silver nitrate.

(c)	Metric	Apoth.
R	Approx.	Equivalents
Benzyl Alcohol	10.00 cc.	5 iiss
Chloroform	20.00 cc.	5 v
Benzyl Alcohol in chloroform (30%)		
R	To make one ounce	
Ether 2 parts	17.33 cc.	
Alcohol 1 part	7.58 cc.	
Thymol 1 $\frac{1}{4}$ parts	7.79 Gm	
R		
Benzocaine	3.5 Gm.	gr. liv
Benzyl Alcohol	17.5 cc.	5 ivss
Oil Cloves	9.00 cc.	5 iimxxv

Ammoniacal Silver Nitrate

Preparation: "Put three grams of silver nitrate crystals into a test-tube and add one cubic centimeter of water. Heat this mixture over a flame to dissolve, being careful not to let it boil. Let it cool until you can hold it in the palm of your hand. Now add strong ammonia water (28%) slowly. At first a black precipitate will be formed. Keep adding ammonia and shaking the mixture until the black is *almost* all dissolved. Do not let it all dissolve or you will have too much ammonia, which is undesirable. The remaining black precipitate is removed by filtering through filter paper. The filtered solution is to be kept in a brown bottle to protect it from light to which it is sensitive." (For-sythe's *Interne's Manual*.)

Note: Colorless, almost odorless liquid.

Apply to sensitive or carious area and reduce with eugenol or 10% formaldehyde solution. Application limited to posterior teeth because of stain.

Approx. 30% Silver Diamino Nitrate Solution. It probably produces in carious areas a mixture of silver proteinate and reduced silver.

Claimed less toxic than Silver Nitrate. The finely divided silver resulting from this procedure retards progress of decay in carious dentin.

Useful also in root canal operations.

Quantities make approximately 5 cc.

"The Treatment of Hypersensitive Dentin," Report of the Council, *Journal of the American Dental Association*, 21, 2050 (1934).

How to Prepare Solution: Care should be exercised in preparing the ammoniacal

solution to see that the silver nitrate and stronger ammonia water meet the U. S. P. requirements. Distilled water should be used to dissolve the silver nitrate, for it should be free from chlorides. Gentle heat may be used, but do not boil. If the silver nitrate is powdered it will go into solution more quickly. The quantity of water in the formula produces a saturated solution, therefore solution is slightly delayed. When the silver nitrate is in solution add about 1 cc. of stronger ammonia water. From then on add it carefully, drop by drop, until almost all the black precipitate is dissolved, but not all. Filter the liquid to remove the remaining black precipitate and package in small brown glass bottles or in brown glass ampuls.

After use, the solution is reduced by eugenol or formaldehyde 10%. Pharmacists should read, in addition to the reference under the prescription, an article by Dr. James Mark Prime entitled "Controlling Dental Caries," published in the *Journal of the American Dental Association and Dental Cosmos*, Vol. 24, pp. 1950-1961, December 1937. Dr. Prime gives some helpful information obtained from Dr. Va Berka about the properties and preparation as follows:

"If formalin is used as a reducing agent the basicity of the original solution is overcome and tends to leave the system with a pH below seven, well on the acid side, due to formic acid formation. Another thing to be noticed is the fact that the silver is not precipitated in the metallic state to a large degree, but rather large amounts of silver oxide are found to be present.

"When eugenol is used as a reducing agent a slower reduction takes place, but at no time was the pH found to be on the acid side—rather a pH higher than seven resulted (alkaline). The reduction of the silver is more nearly complete, with a fine, shiny, mirror-like surface being produced."

He also offers the following precautions:

- "1. Avoid touching the crystals with the fingers or other organic materials.
- "2. Use only transparent, uncolored crystals.
- "3. Accuracy in weighing.
- "4. Use freshly distilled water.
- "5. Use clean glass receptacles for dissolving and check for precipitates by holding sheet of paper behind the transparent vessel.

"6. Store in clean amber bottles with glass stoppers. Avoid light."

Stains on fingers, nails, linen and face can be removed with iodine or saturated solution of potassium iodide.

The Hale Prescription Pharmacy
Lowell, Massachusetts
March 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

A month has passed since I sent you the first series of prescriptions. I trust that they were helpful.

The prescriptions this month are for sedation and pain-relieving medication. May I draw your attention to the use of bromides as preliminary treatment for the apprehensive person. Bromides relieve nervous tension. They make the patient less likely to concentrate on his condition. A day's treatment before appointment will save you much time and give the patient considerable comfort.

The anesthetic action from a troche of ethyl aminobenzoate dissolved slowly on the tongue will help give relief from pain in the oral cavity. This troche will also give relief from gagging when impressions are being taken.

There is no specific desensitizer for local application to hypersensitive dentin, but pain can be alleviated. Four commonly used formulas are recommended. We shall be glad to supply you with a sample of any of them on request. Ammoniacal Silver Nitrate merits your attention. It diffuses readily into the dentin, terminating bacterial action and the progress of caries. It stops the pain from exposed dentin. The special technique for preparing this solution is given very careful attention so that its efficiency is unimpaired when it reaches you.

I should be happy to stop at your office to talk over the problems of dental medication. Have your assistant call Humboldt 3-5072 to make an appointment.

Very truly yours,
ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Articles Recently Accepted or Rejected by the Council on Dental Therapeutics

Accepted Dental Remedies, *Journal American Dental Association*, Vol. 26, December 1939: Briggs Tooth Powder, Selco Tooth Paste, Kolynos Dental Cream, Newco Dental Cream, Milkident Dental Cream. *J. A. D. A.*, Vol. 27, February

1940: Carley's Tooth Powder, Orrin's Tooth Powder, Pogue's Tooth Powder, Bond Anesthetic Procaine Solution, 2% with Epinephrine 1:50,000, and Bond Anesthetic Procaine Solution 2% with Epinephrine 1:25,000.

Not accepted for Accepted Dental Remedies, *Journal American Dental Association*, Vol. 27, January 1940: Gardinier Sedative Cement.

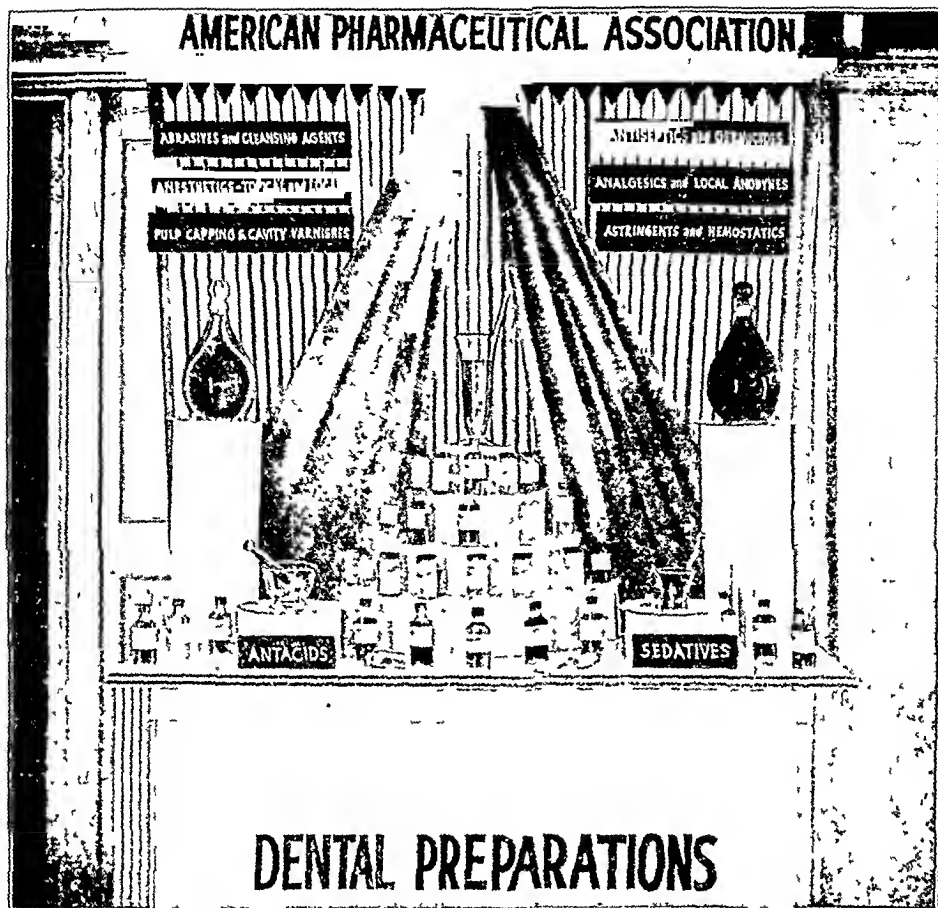
Dental Exhibit

Many pharmacists have asked about an exhibit to be used at meetings of dentists and pharmacists. What preparations should be displayed, where are the formulas to be found, how large should the display be and what is the cost of making a display, are a few of the questions asked. The picture accompanying this month's article shows a dental display which may be used as a guide. To duplicate the display (not including the preparations) would cost about \$8.50. Materials exclusive of signs and bench cost 65c. Signs cost about \$5.00. The bench on which the display is placed was made from a large box which originally contained a radio. It measured 55 x 35 inches. The top was 23 inches deep. It was given a coat of white enamel. The strips of trim were nailed on the sides and painted gold, as well as the edge of the top. Two dollars will buy the paint and brushes. The material and preparations used are listed as follows:

- 2 rolls crepe paper—colored.
- 2 rolls crepe paper—white.
- 1 sheet of fluted paper for columns 24" x 48"—white.
- 4 pieces white cardboard 8" discs.
- 1 wood stand 35" high, 55" long, 24" wide, painted white with gold trim.
- 1 heavy cardboard sign 6" x 35" with 4" black letters.
- 1 heavy cardboard sign 4" x 55" with 3" black letters.
- 1 semicircular stand 24" wide and 17" high.

Preparations Suggested for a Dental Display

Alkaline Sodium Chloride Solution
Ammoniacal Silver Nitrate
Camphorated Phenol, N. F.
Capsules of Acetanilid Co., N. F.
Calcium Lactate, U. S. P.
Cavity Varnish (Gum Copal 3%)



DENTAL PREPARATIONS

Cavity Varnish—Rosin
 Cavity Rinse No. 4
 Dental Abrasive Capsules
 Dental Abrasive Paste
 Dentifricium, N. F.
 Denture Adhesive
 Denture Cleaner—Tri-Sodium Phosphate
 Diluted Talbot's Solution, N. F.
 Dentilin. Aconit. et Iodi Co., N. F.
 Dental Anodyne Paste, N. F.
 Disclosing Solution
 Elixir Bromidorum Trium, N. F.
 Epithelium Solvent
 Lin. Saponis Mollis, U. S. P.

Liq. Antisepticus, N. F.
 Liq. Arom. Alk., N. F.
 Liq. Cresol. Saponat., U. S. P.
 Mouth Wash No. 3
 Odontalgicum, N. F.
 Paste for Dry Sockets No. 7
 Pulp Capping Material
 Solution for Denture Abrasives
 Topical Anesthetic
 Troches

All preparations are included in Accepted Dental Remedies unless otherwise stated.

Secretary Bernard A. Bialk of the Michigan Branch has offered a year's membership in the A. P. H. A. as a prize for the best paper based on a survey of old prescriptions. Mr. Bialk is instructor in pharmacy at the Detroit College of Pharmacy and members of his class in dispensing pharmacy are eligible. He also is owner of the Charles Mann Drug Store and prescriptions used in the survey, dating back to 1900, are from his store. Among the points to be stressed are trends in prescription writing, medication and the increase of proprietary remedies.

At the District meeting, N. A. B. P. and A. A. C. P., held at San Antonio, Texas, February 7th and 8th, the boards of Kansas and Missouri were honored. Kelsey Petro, Topeka, Kans., was elected as chairman of the Sixth District for the ensuing year; and C. R. Bohrer, West Plains, Mo., was elected permanent secretary and treasurer. Several invitations were received for 1941, and Topeka, Kansas, was selected as the next meeting place. Roy E. Phillips, of San Antonio, presided; and delegates from Arkansas, Missouri, Kansas, Oklahoma, and Texas attended.

How Training in Pharmacology Helps the Retail Druggist in the Successful Practice of His Profession

Have you ever tried to teach anyone to drive a car? If you have, you know that there are two methods. You may tell your pupil that when certain levers and pedals are moved, certain things happen. On the other hand, you may teach your pupil to drive a car by explaining what happens under the hood when he performs his various operations from the driver's seat. You would explain, very simply perhaps, the mechanism of the clutch, the transmission, the carburetor and other operating parts of the modern car. In other words, you would want the pupil to understand the mechanism of the car's operation. If it is true that men are better drivers than women, the explanation might lie in the fact that men are more mechanically minded and, having an understanding of the mechanics of the car, they perform better than women, who learn by memorizing certain movements.

Up until the last 15 or 20 years, pharmaceutical education has been following the first method. Students were taught how to perform certain technical tasks more or less by rote. However, in the last 20 years it has slowly become more and more obvious that the ultimate rationalization of most pharmaceutical processes is to be found in a pharmacological explanation. This realization has resulted in the introduction of pharmacology into the pharmaceutical curriculum.

A pharmaceutical chemist can analyze a drug with great care and accuracy, but his results are meaningless until the pharmacologist has established a relationship between the amount of a drug and the effect it will produce. In other words, the medical sciences use the absolute values that are found in a chemical assay simply as an index of the potency of a drug. The Pharmacopœia and National Formulary give definite standards for the purity of the drugs and preparations which they contain and set up certain tolerances. Since these standards are often checked by chemical tests it is easy for the result of the chemical assay to

become an end in itself. But one must not forget that the factors which govern these tolerances are pharmacological factors and that these tolerances are set up only after the question of the pharmacological potency of the drug has been considered.

Even the processes of practical pharmacy carried out in the retail store have a background of pharmacology since there is the expectation that the drugs will be used for therapeutic purposes. Why are isotonic solutions used? Which menstruum is best for making an extract of a crude drug? Why an enteric coating? Why is it preferable to dispense some drugs in tablets rather than in solution? Why should morphine and other narcotics be kept locked up? The answers to all these questions lie in some pharmacological property of the drug.

It is true that a prescription could be filled just as accurately and just as effectively without this knowledge, just as it is possible for an individual to drive an automobile without any knowledge of the function of the carburetor or the transmission. But in such a case something is missing. Certainly in a field such as pharmacy, this understanding of the mechanisms is what makes it a profession.

The objective of pharmacology in the pharmacy course, therefore, is to furnish the pharmacist with an understanding of "what goes on under the hood." The modern course emphasizes the mechanisms of drug action and attempts to teach students not only what drugs do but how they do it.

Taught in this way pharmacology is invaluable to the pharmacist in more than one way. It will, of course, enable him to understand the problems of the physician and to work with him as a colleague. It will enable him to intelligently answer customers' questions and will teach him to avoid the practice of therapeutics by counter prescribing. More than these, however, it will give him a new respect for the drugs he handles and enable him to think more intelligently about the problems of his profession.

Committee on Professional Relations

Second Report

By C. B. Jordan, Chairman

Report No. 1 has been printed in the first issue of the *Practical Pharmacy Edition* of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, pages 23-25. I hope that the members of the A. PH. A. are reading these reports. Your chairman received answers from seventeen states when he sent out his first circular letter asking for a report of the Professional Relations committees. A new letter has been sent to the secretaries of the state associations who did not respond to the first letter and it is anticipated that a report shall be received from the missing states. If possible, your committee will give an abstract of the report of the Professional Relations activities of all of these states prior to the annual meeting in May.

As the reports come into your chairman, it is very evident that many of our state associations are exceedingly active in building up better professional relationships with the medical and dental professions. Judging from the reports thus far received, the Professional Relations committees of Maryland and West Virginia have been the most active, contacting the physicians and dentists every month. Success in such an effort as this will depend upon continued and persistent efforts and these two states should be receiving coöperation from their sister professions.

One state reports that they do not have any Professional Relations committee and that no effort along this line has been made. Another state secretary asks that information concerning the activities of Professional Relations committees be sent to the president of the state association with the assumption that this state will inaugurate a program for professional relations. Your committee has sent to the president of this association a report which we believe will be helpful to him.

Your committee is pleased to report professional activities as follows:

Cleveland Academy of Pharmacy.—This Academy sends seasonal prescriptions to the

physicians on small cards, and printed on the back of these cards are the names and addresses of the membership of the Academy. They also distribute blotters with the seal of the Academy of Pharmacy in the center of which is the following: "Northern Ohio Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION, Incorporated 1932." This blotter contains the names and addresses of the membership of the Academy and the legend, "Send your prescriptions to a member of the Academy of Pharmacy."

Prof. N. T. Chamberlin, of Western Reserve University, reports on the activities of the Academy as follows:

"In the words of Calvin Coolidge, I choose to answer your request for 'fifty to one hundred words setting forth the accomplishments of the Cleveland Academy of Pharmacy as it affects our sister professions,' as follows: The Cleveland Academy of Pharmacy has the hearty coöperation of a regularly appointed committee of the Cleveland Academy of Medicine in its efforts to furnish a true professional service. Through the Academy of Medicine's mailing list, the Academy of Pharmacy persistently keeps fourteen hundred Cleveland physicians conscious of Pharmacy's usefulness to the medical profession. The bulletins and type prescription cards regularly forwarded serve the purpose of 'refresher memos' to busy and not-so-busy practitioners alike. This method of contact is less time-consuming for both groups and avoids the 'detail' merchandising methods which are becoming more and more offensive.

"We have done little with Dentistry so far. In March, however, we are going to start a program in coöperation with the Dental Association—I should say that we hope to do so. Plans are not yet complete.

"I hope to attend the Board and College meeting at Columbus in March. Perhaps I shall submit something at the meeting on local professional relations. Do you not think that would be a worthwhile contribution? In any case, I shall have a little more information for you. I take it that you will be there."

With this report Professor Chamberlin enclosed copies of two 1940 bulletins that have been issued by the Academy of Pharmacy and the Northern Ohio Branch of the A. PH. A. Bulletin No. 1 is on the subject, "Notes on the Labeling of Drugs That Pass into Interstate Commerce." This

bulletin explains quite fully the provisions of the Food, Drug and Cosmetic Act that will be of particular interest to physicians and pharmacists. Bulletin No. 2 is on the subject, "Notes on Methyl Rosaniline Chloride U. S. P. (Gentian violet, crystal violet, methyl violet)." This bulletin describes this product and discusses it from the standpoint of therapeutics and the pharmacy of the product.

It is quite evident that the Cleveland Academy of Pharmacy is doing a very fine job in developing better professional relationships. The Committee wishes that every state pharmaceutical association could pattern after the effective way in which this Academy operates.

New York State.—Dr. J. Leon Lascoff, Chairman of the U. S. P. and N. F. Committee of the New York State Pharmaceutical Association, submits a complete report of the work of his committee. This report is voluminous and Dr. Lascoff explained that he did not have time to abstract it. Therefore, your chairman has assumed this responsibility. I am quite sure the following abstract will not be entirely satisfactory to the people of New York State, but it will, at least, show in a measure what this very active committee is doing and, unfortunately, space will not permit the incorporation of the complete report. Your committee is particularly interested in the statement made by Dr. Lascoff to the effect that 43,000 booklets entitled, "Revised Physicians' Pocket Manual," which is a U. S. P. and N. F. booklet, have been distributed to physicians, dentists, veterinarians and medical students. He also reports that the Professional Relations Committee is planning an exhibit to be placed in the New York Academy of Medicine. This has been approved by the Medical Division and the exhibit is now in the making.

Abstract of New York Report:

"It is my belief that we have made greater strides forward, in this respect, during the year 1938-1939 than in any other year in our history.

"Many joint meetings of physicians and pharmacists were enthusiastically attended. Mutual problems were amicably discussed, and proposals of future value were suggested. As the result of the

propaganda which we have conducted, a friendly, coöperative attitude is apparent among physicians in their relations with pharmacy and pharmacists.

"On February 8, 1939, several members met with the Sub-Committee of the Committee on Public Relations with the Pharmaceutical Profession (The County Medical Society of the City of New York) at the Academy of Medicine. There were five pharmacists and four physicians present. Dr. Orgel, who called the meeting to order, pointed out that the purposes of the meeting were:

1. For the mutual exchange of opinions and recommendations.

2. To find ways and means whereby physicians and pharmacists could coöperate more efficiently.

3. To discuss the methods by which the pharmacists can impress upon the physicians the importance and value of prescribing U. S. P. and N. F. products.

"On March 10, 1939, these committees met again. At this meeting it was suggested that a joint committee of physicians and pharmacists be appointed for the purpose of investigating complaints of unethical practices on the part of pharmacists.

"A recommendation was also made, at that time, that the New York State Pharmaceutical Association present a permanent exhibit of U. S. P. and N. F., and A. P. H. A. Recipe Book preparations to the Academy of Medicine.

"In a manner of speaking, history was made at the March 10th meeting. The Medical Society of the County of New York agreed to send out copies of the Revised Physicians' Pocket Manual to each and every one of its members. This is the first time that this has been done by any medical organization. The cost of the distribution of these manuals is to be borne by the New York Pharmaceutical Association.

"It was decided at this meeting to order 50,000 booklets and 50,000 envelopes for distribution. The words 'Presented with the compliments of the Medical Society of the County of New York' are to appear on the cover of each manual.

"Your Chairman wishes to report that 43,000 of these booklets have already been distributed.

"Your Chairman has received a report from the Upstate New York Pharmaceutical Council indicating that that branch has spent a busy and profitable year carrying out our U. S. P. and N. F. propaganda. The report sent in by Mr. Wm. H. Arndt, secretary, reads in part as follows:

"During the past year, Rochester pharmacists had two joint meetings with the Rochester Academy of Medicine. Prescription writing for official preparations was stressed. Arguments for same were based on the many points expressed by you at various times. Some of the local pharmacists followed the above initial step by making personal calls on selected physicians and again spread the gospel of U. S. P. and N. F.—in this latter contact, they naturally mentioned the fact that their store was equipped to supply the service that was being promoted. Considerable favorable results have come from this

missionary work. I am confident that the good labor will be continued to insure increased benefits to both the professions of medicine and pharmacy.'

"Mr. F. S. Frankfurter reports that after five years of diligent and constant effort, the Westchester County Pharmaceutical Association has succeeded in forming a Medical-Pharmaceutical Relationship Committee, consisting of five members each of the Medical Society of the County of Westchester and the Westchester County Pharmacutcal Association, for the purpose of bringing about a closer and more cooperative relationship between the two allied professions.

"In an issue of the *Westchester Medical Bulletin* appeared notice of another important step forward in the betterment of relations between physicians and pharmacists. The Westchester County Pharmaceutical Association and the Westchester County Medical Association have formed a Medical-Pharmaceutical Arbitration Board.

"The following report was received from Mr. Frederick Lascoff:

" 'Dear Mr. Chairman: I am pleased to report the following U. S. P. and N. F. activities for the past year.

" '1. Published a monthly column in the *New York Physician* of questions and answers. Submitted 5 to 10 seasonal U. S. P. and N. F. preparations each month.

" '2. Edited blotters for the New York Pharmaceutical Council, giving seasonal formulas. The blotters were distributed to various pharmaceutical societies of New York for distribution to the physicians.

" '3. Gave a lecture on the value of U. S. P. and N. F. preparations before the Lackawanna Pennsylvania County Medical Society.

" '4. At the Association for the Advancement of Professional Pharmacy meetings, we stressed the importance of U. S. P. and N. F. preparations.

" '5. In the fall, under the auspices of the New York County Pharmaceutical Society in conjunction with the New York County Medical Society, and through the efforts of Drs. Ballard, Wimmer and Piccoli, and through the cooperation of the Association for the Advancement of Professional Pharmacy, a "Refresher" course will be given on prescription problems for the physicians, to be held if possible, at the Academy of Medicine. The pocket manual of the New York State Pharmaceutical Association will probably be used as the text, and will also be distributed to the physicians at these meetings.'

"It is therefore fitting that since we are all pharmacists, and not merely merchants, that we all get together at that time, in wholehearted observation of the October Pharmacy Week. Observation of this week by a scattered few has little conviction in back of it—the support must be one hundred per cent. The pharmacist who does not take this stand in no way merits the title he bears; the worst of it is that he is dragging the conscientious ones down with

him. The public must in some way be reminded that there are still some drugs in the drug store. Not that it is the fault of the public for forgetting it, but rather that of the pharmacist in helping them to forget it. The latter may not care to keep pharmacy in the foreground throughout the year. Surely, he cannot reasonably object to devoting one week in enhancing his own good will, the real foundation upon which his existence depends.

"And if during the balance of the year, he should again want to remind his public, as well as the physicians, that his store is a Pharmacy, and that his schooling has equipped him to be a help-mate to the physician, then I would suggest that Professional Window Displays be used more often. For after all, can you fully command the respect of the physician or your customer, when the first thing that he sees upon approaching your store are two "beautiful" cigarette window displays. Certainly, cigarette window displays are not very conducive to confidence by the physician in the pharmacist.

"Your chairman wishes to take this opportunity to thank all the members for their concerted efforts during the past year. I want to especially say that I am deeply proud of the work that has been accomplished by the U. S. P. and N. F. Committee.

J. LEON LASCOFF"

Massachusetts.—Mr. J. F. Finneran, Secretary of the Massachusetts State Pharmaceutical Association, reports as follows:

"President Brudno determined that something should be done about the relations between physicians, nurses and pharmacists and shortly after taking office appointed an appropriate committee to carry on the work.

"This committee is already at work and has mapped out a rather comprehensive program and we look for results from their efforts in the not too distant future."

Iowa.—Report of activities in Iowa has been made by Mr. Edward S. Rose of Iowa City, as follows:

"As chairman of the state committee to further the use of the U. S. P. and N. F., would say there was presented in four large sectional meetings and in many of the group meetings the promotion of the use of these two official books. For the State Convention the writer wrote a play "The Physician Becomes U. S. P. and N. F. Conscious"—this was presented by the other members of the committee.

"Our committee had an exhibit at the annual meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION at Atlanta.

"The writer prepared for the committee: 'A Challenge to the Pharmacists of Iowa.' This sheet was distributed quite freely over the state—am enclosing a copy."

This committee sends a duplicated letter to every pharmacist in the state pointing out to them how it is possible for them to contact their physicians with particular reference to the U. S. P. and N. F. Formulary Promotion. This letter suggests methods for carrying out the promotion and the benefits to be derived therefrom. The letter is well prepared and contains a great many helpful hints to any retail pharmacist who wishes to develop better professional relationships. The letter is signed by the whole committee.

Your chairman is very glad to report the activities of the above states and academy and hopes that these reports will be inspiring to the Professional Relations committees of the other states. It is interesting to note the different ways in which these committees function. Surely any Professional Relations committee that wishes to do a good job will find plenty of suggestions in these reports.

American Documentation Institute

Documentation in the Service of the Sciences and the Humanities

The annual meeting of the Institute was held in Washington on Thursday, January 25th. The A. Ph. A. is one of the fifty scientific and learned societies, and government agencies which make up the membership of the Institute which is a service organization created to aid scientists and schools and other organizations in solving documentation problems.

The Institute is operated through grants from the Rockefeller Foundation and other agencies. It coöperates through its bibliofilm service which places the contents of great libraries through this method of reproduction at the command of research workers and others interested through auxiliary publications and in the publication of theses, translations and other documents at reduced cost.

The Story of Modern Medicine

Under this title the Medical Society of Essex County, N. J., is running a series of articles in the *Newark Evening News*. As a feature of this series the College of Pharmacy of Rutgers University has been invited to supply a number of the articles and Prof. A. F. Marquier has been responsible for these feature articles which have covered the following subjects: Liver Extract, Bacteria or Germs, the Schick Test, Tetanus or Lockjaw, Adrenalin and Cortin, and the Pharmacist.

Purdue Druggists' Business Conference

On March 12th and 13th, Purdue University School of Pharmacy Extension Department held its 10th Annual Druggists' Business Conference in Memorial Union Building. A few of the highlights were:

An address by Charles Wesley Dunn, counsel for the American Pharmaceutical Manufacturers' Association, who spoke on "Food and Drug and Cosmetic Legislation;" Prof. Fred A. Russell, University of Illinois, spoke on "Now Open for Business;" Dr. E. C. Elliott, President of Purdue University, spoke at the dinner, also Dr. F. B. Knight; Purdue Glee Club; Dean C. B. Jordan paid tribute to honor guests and discussed "Control and Sale of Poisons and Barbiturates."

Druggists who had attended all of the Conferences since 1930 were honored and received certificates of attendance. In addition honor was paid to the new president of the N. A. R. D., Albert C. Fritz, of Indianapolis.

During the conference the philosophy of clerk training, the psychological foundations of human behavior, the principles of economics in salesmanship, sales promotions in the prescription department, hormone therapy as it applies to the pharmacist, cameras and photography, soilless growth of plants, and food, drug and cosmetic regulations with particular emphasis on the new labeling act, were discussed.

The Combined Contact Committee

Representing the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers' Association, at a meeting held in Washington, February 15th and 16th, considered a number of proposed changes in the National Formulary, reported progress on several studies of new or revised analytical procedures and particularly gave attention to certain problems in connection with the packaging and storage of drugs. These problems relate to both proper preservation of different types of drugs and the design of non-deceptive containers. A number of elaborate surveys are under way, which should lead in the near future to a more orderly selection of packaging materials and storage instructions.

During the meeting, the appointment of three new sub-committees was announced. One, the Committee on the National Formulary, will be charged with the duty of studying proposed changes in the Formulary and making recommendations to the Contact Committee. It will also make available, as required, the results of the accumulated experience of the represented manufacturing group, when this information is needed by the Formulary Revision Committee. The other two sub-committees are new medical advisory groups representing each of the associations. These committees will co-operate in the development of a definite pattern for certain phases of labeling.

What Is a Prescription?*

By J. H. Goodness†

The term "prescription," without qualifying words, may have a number of meanings, some professional, some literal (1) and some legal. If we first consider those that are most familiar to us, we find that in the pharmaceutical profession, "prescription" has two or three meanings, as relates to form. The word "prescription" may mean:

First, that it is a *formula*. (This use contemplates no material form, and the formula does not pertain to the needs of a particular person.) Such use of the word "prescription" being indicated by the expression "The prescription section of a book," "Dr. Brown's favorite prescription," and similar expressions.

Second, and most commonly, the word may imply a *writing* of some sort, usually intended as an aid for a particular person in difficulty. At times it implies a practitioner's writing; that is, a physician's prescription, a dentist's prescription, etc. At other times it refers to a writing created and presented by the patient himself: as for instance where a layman copies a formula from a medical book or newspaper. When presented for compounding this latter writing is very often called a "prescription." In states where counter-prescribing is permitted and practiced by a few pharmacists, recording a formula of the dispensed medicine may also be called a "prescription;" likewise, the pharmacist's written record of an oral order by a physician is a "prescription." Speaking of a "ten-prescription-a-day store" implies this second meaning.

It is to be noted that pharmacists call written orders "prescriptions" whether they call for drugs, chemicals, apparatus or implements, or even foods or cosmetics, especially if the writing was created by a practitioner.

The *third* and final meaning of "prescription" is that of the *finished product*. This

last use is indicated when we speak of "prevented incompatibility in the prescription," "making the prescription attractive to the eye," or "the prescription section of a medicine chest."

In professional writings the word "prescription" is less commonly used loosely, although here also it may mean a formula, a writing or a finished product. The first two are the most common uses of the word.

Analyzing only the definitions of "prescription" as found in the textbooks, we find them to have the meaning of *writings*. They fall into four classes, namely:

(A) Those that give the term the broadest meaning and in no way limit prescriptions to the writings of practitioners (2).

(B) Those that admit a broad definition, but define only the physician written formulas as "prescriptions" (3).

(C) Those that admit of no other definition than that prescriptions are formulas written by physicians (4).

(D) Those that define a prescription as a formula written by a physician, dentist, veterinarian and perhaps other practitioners (5).

Professional writings other than textbooks commonly use the word "prescription" to mean either the written or unwritten form. Sometimes they restrict the writings to those of particular persons and at other times they make no such restrictions. For instance, The American Illustrated Medical Dictionary (6) defines it as "a *written* direction for the preparation and administration of a remedy." Gould's Medical Dictionary (7) says it is "a *formula written* by the *physician* to the apothecary, designating the substances to be administered." The Century Dictionary & Cyclopedia defines it as "..... in medicine, a *statement, usually written*, of the medicines or remedies to be used by a patient, and the manner of using them." In these cases please note that a particular patient is contemplated by the definitions.

In LaWall's, "Four Thousand Years of Pharmacy" (8) the author speaks of "The oldest prescriptions (no doubt meaning *formulas* and not intended for a particular

* Presented before the Section on Pharmaceutical Economics, A. Ph. A., Atlanta Meeting, 1939.

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person) are found in the hieratic writings of ancient Egypt." In "The Healing Code of Ancient Civilization," (9) the author in describing the famous Eber's Papyrus says, "It deals both with medicine and surgery, and contains prescriptions (*formulas*) for various diseases with incantations and enchantments." And again (10) "It is known that Egyptian practitioners obtained from priests transcripts of the approved healing methods and prescriptions (*formulas*) to be used in the authorized manner"

The conclusion is that in the pharmaceutical profession, the word "prescription" as used in both speech and writings, may imply more than one thing. In use, consideration must be given such points as whether the word means written or unwritten formula, by whom issued, whether for a particular patient or not and whether merely the order or the finished product. This is not usually as serious a situation as it may appear, for the contexts or the evident facts often determine the exact scope of the word.

The Word "Prescription" in Law

Law consists largely of statutes and decided cases. Considering the statutes we find that practically all state statutes fail to define outright the word "prescription." Pennsylvania, however, defines a "prescription" in its pharmacy law as follows: (11) "The word 'prescription' shall be construed to designate a written order, by a duly licensed physician, dentist or veterinarian, calling for a drug, or for any substance or preparation containing a drug." For the purposes of that state's pharmacy law, all other meanings of "prescription" are not acceptable.

Section 45:14-14 of the New Jersey Revised Pharmacy Law, defines a "prescription" very thoroughly as follows:

"The term 'prescription' as used in sections 45:14-13, 45:14-15, to 45:14-17 of this title means an order for drugs or medicines or combinations or mixtures thereof, written or signed by a duly licensed physician, dentist, veterinarian or other medical practitioner licensed to write prescriptions intended for the treatment or prevention of disease in man or animals, and includes orders for drugs or medicines or combinations or mixtures thereof transmitted to pharmacists through word of mouth,

telephone, telegraph or other means of communication by a duly licensed physician, dentist, veterinarian or other medical practitioner licensed to write prescriptions intended for the treatment or prevention of disease in man or animals, and such prescriptions received by word of mouth, telephone, telegraph or other means of communication shall be recorded in writing by the pharmacist and the record so made by the pharmacist shall constitute the original prescription to be filed by the pharmacist, as provided for in section 45:14-15 of this title." Please notice that here, also, all the professional meanings are not included.

In other states the meaning of the word "prescription" in the pharmacy laws must be gathered from the sections defining "pharmacist," the "practice of pharmacy," "drug store" or in some other section (12). "Drug stores," "pharmacies," are defined as places where certain acts are performed, as for instance, selling drugs, "*compounding prescriptions*" of various types, etc.

By this indirect analysis we find that the states impliedly define "prescription"—usually of the written form—on the basis of who issues them. At least three groups can be created for this classification.

1. "*Physician's prescriptions*" (13). This is by far the most numerous class.
2. "*Prescriptions*" (14).
3. Those formulas addressed to a pharmacist and created by "*licensed physicians and surgeons, dentists, veterinarians,*" and sometimes other named practitioners (15).

It will be noted that the statutory definitions are restricted to the "formula" and the "written" meanings for the word. Also that only designated persons are generally permitted to create the writings or formula. At first glance this might be assumed to mean that a person cannot have a prescription unless it is created by the designated persons. Usually no such fact exists, for pharmacy statutes where they define the word "prescription" define it for a particular purpose. Beyond this purpose the definition may be either broader or narrower.

The courts, to discuss the other division of law, have defined the word "prescription" in but very few cases. Dicta and the use of the word by deciding judges have added to the few "official" definitions.

We find that the Webster's New International Dictionary defines a prescription as

"a *written direction* for the preparation and use of a medicine; a medical *recipe (formula)* also, a prescribed remedy," which definition has been cited in law (16).

In *Caldwell vs. State* (17) the court said, "The word 'prescription' means, in medicine, a statement, usually *written*, of the medicines or remedies to be used by a patient, and the manner of using them."

In *Mayer vs. State* (18) a prescription was defined as follows: "A prescription is a medical *recipe*."

Black's Law Dictionary (19) defines a prescription as "A *direction* of remedy or remedies for a disease and the manner of using them; a *formula* for the preparation of a drug and medicine" (20).

In *Ray vs. Burbank* (21) the court said in speaking of a druggist's orally recommended drug mixture—based on a formula not originated by himself—"why a *recipe* or *formula* for the treatment of horses, may not be called a prescription, we do not see from whatever source it may proceed."

In *Goodwin vs. Rowe* (22) a clerk of a pharmacist was given *oral* directions by a physician to compound a one per cent solution of trikresol. His negligent dispensing of a much more powerful solution was discussed by the court as "filling the prescription."

In *Gandy vs. State* (23) a physician's writing in which the patient was named and which contained the words "has had the flu, and I recommend that he should use strychnine or whiskey as a stimulant for his heart," was held not to be a prescription.

In *State vs. Davis* (24) a writing "for one quart of whiskey" which was signed and dated by a physician was not a prescription because a statute required that the prescription also bear the name of the patient and a statement indicating the whiskey was for medicinal use (25).

Thus far, it would appear that a "prescription" in law centers around either the meaning of *formula* (which requires no writing to exist) or of *written order* (the paper with all its contents). But in *McCahey vs. Albritton* (26) the court in speaking of an error of compounding said, "The prescription (meaning either the *formula* or the

writing) did not call for calomel, but for harmless medicine. There is evidence that it (meaning the *finished product*) contained calomel,," but in *Fleet and Hollenkemp* (27) the court remarking about this use of "prescription" to mean the finished product said ". the words ('*prescription* contained Spanish flies') are injudiciously selected"

From the language of the courts it appears that the word "prescription" applies equally well to the three meanings; namely, the *formula* for a remedy; the *writing* containing the formula; the *finished product* when the medicine has been prepared.

It is true, however, that the "writing" meaning of "*prescription*" is by far the most prevalent in the use of the word by the courts, and the "finished product" meaning the least used. This is due, no doubt, to the fact that in a controversy—usually involving an error of compounding—the *order* for the medicine establishes a primary ground for action, and when the *writing* is named "the prescription" by the courts, this eliminates the use of the same word for any other item to be considered, as for example, the wrong product furnished, or the ordered remedy in its perfectly compounded form.

Usual "Prescription" Elements.—Reviewing both the legal and professional uses of the word—when unaccompanied by qualifications—the word "prescription" possesses the following elements:

1. It is usually in *written* form.
2. It is usually a formula for *medicinal* use.
3. It is usually *issued* by a *practitioner*: a physician, surgeon, dentist, veterinarian (28) or podiatrist (29).
4. It is issued for use on *humans* or *animals* (30).
5. It is issued for use by or on a *particular person* or *animal*.

Special Definitions for "Prescription"

In addition to the general definition of "prescription" as found in both common law and statutes other special definitions also exist. Such special definitions very often center about two requirements; namely, the contents of the written prescription and its source. The term prescription has been given one of these special meanings by the Federal Food, Drug and Cosmetic Act.

Since the term is used in a section excepting prescriptions from the requirements of part of the law, it should not be said that it defines a prescription generally. The federal act under its misbranding of drugs and devices provision (37) establishes the labeling requirement for all medicinal preparations containing any of thirty-six listed drugs and derivatives or preparations of them (32) and then in the next section (33) exempts "preparations" from the labeling requirements, providing the prescription has the following content and form:

1. If it is written.
2. If it is signed.
3. If it is issued by a licensed practitioner. When it contains any of the seventeen listed narcotic or habit-forming drugs or their preparations, then also—
4. If the doctor has specified in writing that it shall not be refilled, or, if existing law forbids the refilling of the prescription.

The provisions of the recently enacted State Food, Drug and Cosmetic laws (34) of Indiana, Nevada and North Carolina, make the first three requirements, as listed above, for prescription exemption, while New York omits the second requirement and requires further that the prescription be kept on file. Virginia omits prescriptions entirely from the exemption section.

In general, statutes, state and federal, make requirements as to the form of prescription only when they call for narcotic drugs, or intoxicating preparations which might be used as beverages. The regulations of the United States Treasury Department, Bureau of Narcotics, in Article 168 of Regulations, Number 5, requires that all prescriptions for narcotics, not specifically exempted, shall:

1. Be dated when issued.
2. Be signed by the practitioner on the day when issued.
3. Contain the full name of the patient.
4. Contain the address of the patient.
5. Contain the address of the practitioner.
6. Contain the narcotic registry number of the practitioner.
7. Be typewritten or written in ink or indelible pencil.

Omission of any of these essentials makes the writing not a legal prescription. A

pharmacist is liable for compounding such an incomplete prescription (35).

The Massachusetts Narcotic Act (38) adds to the above federal requirements for a legal narcotic prescription the "age of the patient." The Massachusetts Liquor Control Act (37) restricts prescriptions for alcoholic liquors to a maximum of one quart in quantity; and for wine or malt beverage, to a maximum of one gallon.

Conclusions

The final conclusion is that the word "prescription" in law as well as in pharmacy may have many meanings. Ordinarily no great harm can arise out of the loose or varied use of the word in pharmaceutical practice, but law enforcement officials, legislators, and, more especially those who draw pharmaceutical bills, must, if they are to be sure and precise, consider *all* the meanings implied by an unqualified use of the word "prescription."

References

- (1) *L. fr. prae* before + *scribere* to write.
- (2) Caspari, Charles, Jr., "A Treatise on Pharmacy," Lea & Febiger (1910), page 508. "The word prescription is defined as meaning a written order or direction to the pharmacist or druggist for compounding and dispensing a medicine."
- (3) Wall, C. A., "The Prescription," C. B. Mosby Co. (1917), page 13. "The term 'prescription' is generally applied only to the direction given by a physician for the compounding of medicines for a patient, but is equally applicable to written directions for the making of a dish of food, or the preparation for technical purposes. In a general sense, any directions given by the physician for the guidance of his patient are called prescriptions; or rather, it is said the physician prescribed for the patient, for example, change of climate, abstinence from tobacco or alcoholic drinks, or rest, or exercise, or a certain diet, etc." Thornton, E. Q., "Dose-Book and Manual of Prescription-Writing," W. B. Saunders (1895), page 33. "The word *prescription* by general acceptance means a physician's written order for medicines, accompanied by directions for compounding and administering." Bentley, A. O., "Textbook of Pharmaceutics," Bailliere, Tindall & Co., London (1937), page 433. "The majority of the formulæ, or prescriptions, which the pharmacist is called upon to compound have been written by a medical practitioner or dentist, for a particular person named on the prescription, and for a particular ailment of that person." Mann, M. D., "Prescription Writing," Putnam's Sons (1903), page 1. "A prescription in medicine, may be defined to be the formula

which a physician writes for dispensing or compounding a certain medicine or medicines, together with directions to the patient for taking it."

(4) Arny, Henry V., & Fischelis, Robert P., "Principles of Pharmacy," W. B. Saunders (1937), page 1037. "The prescription is an order written by the physician calling for medicines to be compounded and dispensed by the pharmacist." Scoville, Wilbur L., and Powers, Justin L., "The Art of Compounding," Blakiston's Son & Co. (1937), page 10. "The prescription is the written order of a physician for the administration to the patient." Cook, E. Fullerton, and LaWall, Charles H., "Remington's Practice of Pharmacy," Lippincott (1936), page 1578. "It may be defined as the formula which a physician writes specifying the substances he intends to have administered to a patient." Solomon, Charles, "Prescription Writing and Formulary," Lippincott (1935), page 70. "A prescription is an order for a medicine written as a formula by a physician." Eggleston, C., "Essentials of Prescription Writing," W. B. Saunders (1928), page 20. "A prescription may be defined as: A physician's written order for one or more medicinal agents, together with his direction to the pharmacist for their preparation and to the patient for their use." Stanislaus, I. V. Stanley, "Textbook of Pharmacy," Van Nostrand Company (1931), page 499. "The prescription is a written order from the physician to the pharmacist containing a formula of remedies and quantities desired, with directions for their compounding and instructions for the guidance of the patient or of his attendant." Ruddiman, Edsel, "Pharmacy Theoretical and Practical," John Wiley & Sons (1925), page 132. "The prescription is a written order from the physician to the pharmacist, requesting that certain drugs be furnished the patient."

(5) Husa, William J., "Pharmaceutical Dispensing," Husa Bros. (1935), page 1. "A prescription is an order signed by a licensed physician, dentist, veterinarian or other medical practitioner for medicine to be compounded by a pharmacist to meet the needs of a certain person at a particular time."

(6) W. B. Saunders (1935).

(7) Second Edition, P. Blakiston's Son & Co.

(8) LaWall, C. W., Lippincott (1927), page 2.

(9) Jayne, W. A., Yale University Press (1925), page 36.

(10) *Ibid.*, page 38.

(11) 35 Pa. Statutes, Section 853.

(12) This subject might also have been approached through the laws on physicians, dentists, etc. For a compilation without citations, of the term "pharmacy" as found in state pharmacy acts see Swain, R. L., "The Modernization of Pharmacy Laws," *American Journal of Pharmaceutical Education*, Vol. 2, No. 4 (1938), 510-517.

(13) As examples: Mass. General Laws, Ter. ed. C. 112, Sec. 37, "Drug business, shall also

mean the compounding and dispensing of physician's prescriptions." For other examples see the pharmacy laws of Arizona, Colorado, Connecticut, Delaware, District of Columbia, Florida, Idaho, Indiana, etc.; the Georgia pharmacy law does not define "prescription" nor use the term in its definition of "drug store" and "pharmacy" (Ga. Code, C. 840-1301) but does mention "physician's prescription" in section 84-1313 which deals with the qualification of applicants for registration as pharmacists.

(14) New York, laws of 1908, C. 21 as amended to the close of 1938, "Pharmacy, any place in which drugs, chemicals, medicines, prescriptions or poisons are compounded, dispensed or retailed" For other examples see the pharmacy laws of Alabama, Arkansas, Maine, North Dakota, etc.

(15) Nebraska Compiled Statutes, C. 71-1801, " the following classes of persons shall be deemed to be engaged in the practice of Pharmacy: 2. Persons who compound and dispense drugs and medicines or fill the prescriptions of licensed physicians and surgeons, dentists or veterinarians." For other examples see the pharmacy laws of Iowa, Tennessee, etc.

(16) Cited in *State vs. Nicolay* (Mo. App.) 184 S. W. 1183; also see *State vs. Bluefield Drug Co.*, 43 W. Va. 144, 27 S. E. 350.

(17) 18 Ind. App. 485, 46 N. W. 697-698.

(18) 83 N. J. Law 35, 42 A. 772.

(19) Third edition, West Publishing Company (1933).

(20) Cited in *State vs. Nicolay*, supra; *People vs. Cohen*, 94 Misc. 355, 179 N. Y. Supp. 591: "A prescription is a mere formula for the preparation of a drug and medicine."

(21) 61 Ga. 505.

(22) 61 Ore. 1, 135 P. 171.

(23) 99 Tex. Cr. R. 143, 268 S. W. 951.

(24) 129 Mo. App. 129, 108 S. W. 127.

(25) See *State vs. Manning* 107 Mo. App. 51, 81 S. W. 223.

(26) 214 Ala. 279, 107 So. 751.

(27) 13 B. Mon. (Ky.) 219 at 226.

(28) 35 Pa. St. 853.

(29) New York Educational Laws, C. 21, Sec. 1357-j and Sec. 1360-c; but see *Ray vs. Burbank*, 61 Ga. 505.

(30) Animals: *Ray vs. Burbank*, 61 Ga. 505, 34 Am. Rep. 103.

(31) Section 502.

(32) Seventeen habit-forming drugs and nineteen potent drugs.

(33) Section 503 (b).

(34) Only the mentioned states had such laws at the time this paper was prepared.

(35) Regulation No. 5. Art. 168.

(36) General Laws Ter. ed. C. 94. Sec. 198.

(37) General Laws, Ter. ed. C. 138. Sec. 29.

A Reference Library for Pharmacists

Furnishing information to physicians, dentists and other practitioners as well as to the public will be one of the most important services expected of the pharmacist in the future. The pharmacist should have a library of the standard publications that are used frequently but it is difficult for him to have all of those which may be required occasionally. To meet this need it was planned to develop a reference library in the AMERICAN INSTITUTE OF PHARMACY as one of the services which the AMERICAN PHARMACEUTICAL ASSOCIATION could render to the pharmacists of the country.

During the more than eighty years since it was established the ASSOCIATION has collected many books, pamphlets and periodicals in addition to its own publications through purchase, gifts and otherwise. Many of them had been in storage for years. After the building was occupied, they were gradually arranged on the library shelves. The Historical Records Survey of the Works Progress Administration became interested in the collection because the publications covered such a long period and rendered great assistance in arranging and cataloging the collections.

The books, pamphlets, periodicals and Government publications are classified and arranged either by class number, alphabetically or chronologically. A dictionary catalog (card) of all the books by author, title and subject makes the material in the books easily accessible as well as showing at

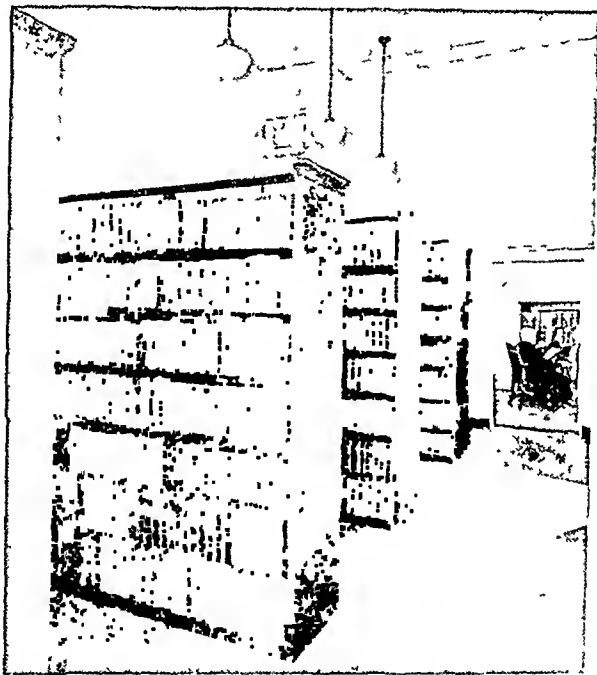
a glance the material in the library on a given subject. The Dewey Decimal system of classification is used and the Library of Congress subject headings.

This classifying process reveals a collection of over 59,000 periodicals, American and foreign, covering over 203 titles; 700 pamphlets both American and foreign; Government publications, both books and pamphlets, bound and unbound, numbering 1500, from the Departments of Agriculture, Commerce and Treasury; the Federal Trade Commission, The Food and Drug

Administration, Bureau of Standards, Bureau of Census, the Public Health Service and many others. The most of these are received regularly. Abstracts appearing in *Pharmaceutical Abstracts* are made from a selected list of the above publications.

The book collection includes Proceedings, Year Books, bound Journals, etc. There are

three distinct collections housed in the Library. The A. P. H. A. Collection consists of books obtained by purchase, individual gifts and many donated by Dr. E. G. Eberle and Mrs. H. M. Whelpley. The James H. Beal and the Joseph P. Remington collections are shelved separately and marked with the name of the donor. These collections number 4500 books dealing with pharmacy, materia medica, pharmacology, pharmaceutical Latin, pharmaceutical chemistry, pharmaceutical botany, pharmaceutical law, therapeutics, bacteriology and many other subjects in the field of pharmacy.



The many inquiries coming to the Library by mail, phone and in person are kept and filed with notation regarding the answer in the event that the same question is asked at some future time. Through coöperation with the libraries of the various Government agencies and other technical libraries located in Washington the great majority of inquiries are answered satisfactorily.

With the completion of the classifying and cataloging, our efforts now turn toward completing the periodical files by securing the missing numbers and toward building up the library in content based on experience gained as to the purposes it can serve.

President-Elect Charles H. Evans

A large group of friends and admirers of Mr. Evans attended the dinner given in his honor at the Atlanta Biltmore Hotel on Tuesday evening, March fifth, by the pharmacists of Georgia. The hall was beautifully decorated and the occasion was a great success.

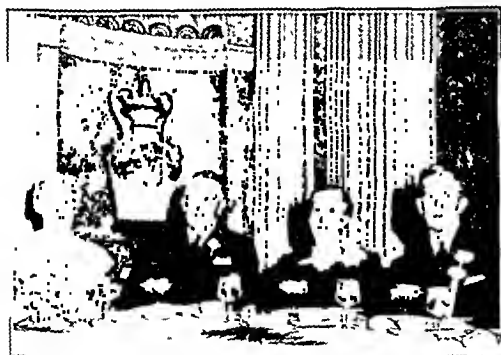


Photo by John Y. Coffee

Mr. Charles D. Jordan, of Monticello, Ga., was toastmaster, and the following addresses were enjoyed: "Charles Hall Evans—Citizen," Rev. Warren Candler Budd, of the M. E. Church at Warrenton; "Charles Hall Evans—Employer," R. L. Fulgbum, of Warrenton; "Charles Hall Evans—Pharmacist," R. Lee Olive, Augusta; "Charles Hall Evans—Pharmacy Board Member," J. L. Hawk and L. N. Camp, of Atlanta; "Charles Hall Evans—State Association Executive," Bonnie Brown of Lyons; "Charles Hall Evans—National

Association Figure," John A. Goode, Asheville, N. C., and Robert C. Wilson, Athens, Ga. Mr. R. D. Rainey of Atlanta presented testimonial letters. The program was brought to a close with a response on the part of Mr. Evans.

Seated in the accompanying photograph are: Mrs. C. H. Evans, Mr. C. H. Evans, Mrs. Mary H. Evans (mother of Mr. Evans), and C. H. Evans, Jr., son of Mr. Evans, a student at the University of Georgia.

NOTICE

If any Alumni Fraternal or Divisional Group desires to sponsor a breakfast, luncheon or dinner at the meeting of the A. Ph. A. in Richmond May 5th to 11th, they should contact and make their arrangements through the local committee. Dr. Harvey Haag, Professor of Physiology and Pharmacology at the Medical College of Virginia is chairman of the committee that will have charge of making arrangements for these functions.

ATTENTION, MEMBERS!

Will all members of the A. Ph. A. who attended the Richmond meetings in 1900 and 1910 send their names and addresses to Dr. W. F. Rudd, Medical College of Virginia, Richmond, Va.?

Census of Population

In April the greatest fact-finding undertaking in our Nation's history will take place, when the 16th Decennial Census of the population of the United States will be conducted. The general questions to be asked are as follows: name, address, household data, relationship, personal description, education, place of birth, citizenship, residence prior to 1935, employment status, place of birth of parents, language spoken, veterans, social security, usual occupation, marital status.

To be conducted at the same time are the censuses of Housing, Agriculture, Drainage and Irrigation.

Notable Developments in the Pharmacopoeial Revision Program

Chairman E. Fullerton Cook of the U. S. P. Committee of Revision was the guest at dinner of the Detroit Retail Druggists' Association and the Wayne County Medical Association on February 19th in Detroit, and in the evening spoke before a joint medical and pharmaceutical meeting.

After discussing the greatly increased responsibilities of the Pharmacopœia under the new Food and Drugs Act, and the resulting policy of continuous revision to keep the Pharmacopœia in line with the rapid developments in the medical sciences, the work of the recently added Advisory Boards was reviewed.

The Vitamin Board has established standards and official biological assays for Vitamin A, Vitamin D and for Vitamin B₁ (Thiamine Hydrochloride), and chemical and physical standards for Ascorbic Acid (Vitamin C) and for Nicotinic Acid (the Anti-Pellagra factor of the Vitamin B Complex).

The standards and control established for Anti-Anemia products by the Anti-Anemia Board, the standards being set up for Estrone and other sex hormones by the Endocrine and Hormone Board were explained; the accomplishments and plans of the Sterile Products Advisory Board in preparing standards for Surgical Sutures, and for Absorbent Cotton, Adhesive Plaster, Gauze, Bandages, etc., were presented.

Decennial Pharmacopoeial Convention

Chairman Cook urged the sending of delegates to Washington next May by physicians and pharmacists who would uphold the splendid traditions of both professions. He emphasized the injunction of Dr. Lyman Spalding, written in 1818, urging members of the profession to help in the establishment of the first U. S. Pharmacopœia, who "must be gentlemen, *qualified* and *willing* to serve." Fortunately, the Pharmacopœia has been able to enlist the interest and help, throughout its one hundred and twenty years of existence, of gentlemen of the professions, exhibiting the splendid qualifications set forth

by Dr. Spalding and prepared and willing to meet the constantly increasing and always more exacting demands of the U. S. P.

A More Permanent Pharmacopoeial Organization

Chairman Cook also stressed the importance of establishing a more permanent and stable Pharmacopœial organization. Up to the present time the chairman has usually provided the facilities for the central organization. In the case of Dr. Rice, from 1880 to 1900, this was the private office of the chairman at the Bellevue Hospital, New York City. From 1900 to 1918 Chairman Remington contributed several rooms in his private home. From 1918 to 1920 Chairman LaWall also utilized his personal business office, and this was rented for a small fee by the Pharmacopœial Board for Chairman Cook during the period from 1920 to 1930. In the current decade the facilities for the personal office of the chairman, the greatly enlarged Pharmacopœial staff and room for all of the Pharmacopœial storage have been furnished without charge by the Philadelphia College of Pharmacy and Science.

The many ramifications of Pharmacopœial work, which have been developed increasingly through the years, have always centered in the office of the chairman. This means the publication of all official documents, whether the official Circulars, the individual Bulletins of the fifteen Subcommittee Chairmen, or the official Letters or Bulletins issued in connection with the new programs of the Vitamin Advisory Board, the Anti-Anemia Board, the Hormone Board and the Sterile Products Board, the Packaging Committee, the two Digitalis Research Programs, and all other official documents are distributed from the chairman's office.

The Reference Standards Program of this decade is also handled by the chairman, and the fact that this has meant the distribution of more than 8000 Reference Standards in the past few years, with their packaging and

billing, has only added another activity to the Pharmacopœial Central Office.

It is, therefore, increasingly important with the fully accepted quasi-legislative status of the Pharmacopœia under the new Food and Drugs Act, that the chairman's office should be organized immediately with a permanency sufficient to ensure the continuance of the many activities, no matter what accident or circumstance might occur to change the administration. So large an amount of routine responsibility is now being handled by the chairman's office, that the demands for immediate handling of correspondence and activities are far in excess of the capacities of one executive.

Furthermore, the chairman could render a far more efficient service in the Pharmacopœial field, if he were more free to present the Pharmacopœial program to medical and pharmaceutical groups throughout the country. The editorial problems of the Pharmacopœia are of themselves a sizable responsibility, and with the present program are almost continuous. Dr. Cook therefore recommended that the authority be granted, as soon as possible, for the appointment of an executive assistant to the chairman, with the understanding that when a suitable person has been selected and appointed, this office shall be relatively permanent.

Pharmacopœial Headquarters

Another Pharmacopœial development, which seems almost automatically to force consideration, is the establishment of permanent Pharmacopœial Headquarters. The recent report of expenses by the chairman pointed out the rather startling fact that during this decade the chairman was called to Washington about one hundred times. The Ergot Hearing, the many Hearings and Conferences concerning the Food, Drug and Cosmetic Act, necessary conferences with members of the Committee of Revision meeting in Washington, conferences with officials of the Government at the Bureau of Standards, the Public Health Service, the Army and the Navy, the Cotton Economics Bureau, the Food and Drug Administration, the State Department and other Government Departments were responsible for some

of these trips. At other times the Committee of Revision has held Public Hearings, and the various Advisory Boards have held conferences in Washington. In other words, National Medical and Drug organizations to-day make Washington the center for many of their activities, and there is a constant demand for someone to officially represent the Pharmacopœia at these meetings.

The time is rapidly approaching, therefore, when, in the opinion of the present chairman, a National Headquarters organization for the Pharmacopœia should be independently established in Washington. The Pharmacopœia has repeatedly demonstrated during recent years, and especially since the passage of the new Food, Drug and Cosmetic Act, that its functions are many sided, but that probably its most important duty is to serve as the nucleus for assembling scientific facts concerning important medical standards, obtaining these from every possible source and giving them the widest publicity, later giving those interested an opportunity for open hearings. While there are these associated activities, the major responsibility of the Pharmacopœia, which still remains, is the reaching of decisions of a quasi-legislative character, free from bias, commercial interests or any other influence which would disturb the correctness or fairness of the standards. This independent, judicial position of the Pharmacopœia must always be safeguarded. For this reason it is strongly recommended that as soon as the Board of Trustees can see its way clear to finance an independent office in the City of Washington, such Headquarters should be established.

District No. 2

The Conference of Boards and Colleges of Pharmacy met in Baltimore, Md., on March 4th. New York, New Jersey, Maryland, Delaware, Pennsylvania, District of Columbia, Virginia and West Virginia were represented. Extension of "drug store internship" plan was urged.

A panel discussion on "Practical Experience—Before or After Graduation," led by Dean C. L. O'Connell, Dr. John J. Debus and Prof. J. Lester Hayman followed the reports of the first session. In the afternoon, after the various reports were read, there was a panel discussion on "Shall We Have a National Licensing Examination?" Dr.

E. S. Elwood, secretary-treasurer of the National Board of Medical Examiners of the United States, opened the discussion and Dr. R. L. Swain, Dr. Ivor Griffith and Mr. A. L. I. Winne represented the boards and colleges. At the third session a review of State Legislation and Regulations, past and pending, was heard, and, following reports, a panel discussion, "What Admission Policy Should the Colleges Pursue?" in which Dr. P. R. Fischelis, Dr. C. W. Ballard and Dean W. P. Briggs took part, was enjoyed.

At the dinner a portrait of Dr. A. G. DuMez, dean of the School of Pharmacy, was presented to

the University of Maryland. Mr. Aquilla Jackson was toastmaster, Mr. Frank L. Black represented the Alumni Association of the School of Pharmacy, and presented the portrait; Dr. H. C. Byrd, president of the university, accepted the portrait; Dr. E. F. Kelly represented the AMERICAN PHARMACEUTICAL ASSOCIATION; Dr. Ernest Little, the American Association of Colleges of Pharmacy, and Dr. R. L. Swain, the American Council on Pharmaceutical Education.

The next conference will be held in Washington, D. C., March 3-4, 1941.

Massachusetts College of Pharmacy



A group of about sixty students, accompanied by Professors Ray S. Kelley, Maynard W. Quimby and Joseph H. Goodness, spent the forenoon of Saturday, March 9th, at the American Institute of Pharmacy, on their return from a trip to Detroit and Indianapolis where they visited the plants of Parke, Davis & Co. and Eli Lilly & Co.

The visitors were welcomed by Secretary Kelly who outlined the purposes of the Institute and the activities carried on in it. Editor-Emeritus Eberle

spoke about the publications of the ASSOCIATION.

In groups of about fifteen the visitors were then escorted through the building and given an opportunity to inspect it thoroughly. The groups reassembled in the Main Hall and after the following group picture was taken they left for a sightseeing trip around Washington. The visit and the opportunity to acquaint the students with the Institute and the work of the ASSOCIATION is deeply appreciated.

President A. G. DuMez was a guest at the Annual Banquet of the Drug, Chemical and Allied Trades at the Hotel Biltmore, New York City, Thursday evening, March 14th.

John F. Wannenwetsch, treasurer of the Maryland Pharmaceutical Association has donated an iron mortar and pestle found in the basement of the building occupied by him. A definite date cannot be given, but it is probably a hundred years old. The gift has been placed in the Museum of the AMERICAN INSTITUTE OF PHARMACY and thanks are extended to the donor.

President Roosevelt has again appointed Dr. Thomas Parran, Jr., to the post of United States Surgeon General.

BOOK NOTICE

Stage Fright and What to Do About It, by DWIGHT EVERETT WATKINS, A.M., Associate Professor of Public Speaking, University of California, Berkeley, and Harrison M. Karr, Ph.D., Instructor in Public Speaking, University of California, Los Angeles. Illustrated by Zadie Harvey. The list price, \$1.50. Publishers, Expression Company, Boston, Mass.

The publication covers the phases of the subject—scientifically and analytically; it is informative and amusing. The authors state that they have considered the cause of stage fright from the psychological, biochemical and sociological viewpoints.—E. G. E.

For a Better U. S. P.

By Wortley F. Rudd

Our first real interest in pharmacopœial revision was born during the 1910 U. S. P. Convention. We had not owned a copy of this book during our course in pharmacy. Indeed, our instructor in this subject had graduated from one of the large independent Eastern schools whose faculty members—his former instructors—published compendia that were used very widely at that time. Their adoption made the purchase of the U. S. P. by students and practicing pharmacists largely unnecessary as much of the text matter, including formulas, etc., was apparently lifted from the U. S. P. to these texts. It struck us as passing strange that this sort of thing was condoned. It has taken a generation to break the custom.

It may not be out of place to observe that not until leadership was assumed early in this century by the university schools of pharmacy, were these methods which had prevailed so long, outmoded.

Prior to the convention of 1920, there seems to have been no noticeable opposition to the rather limited group that for decades had controlled U. S. P. revision policies and finances. Even at that time opposition was more or less sporadic. Gradually, however, university influence in pharmaceutical affairs was being felt. Their faculties were being strengthened by the addition of modernly trained chemists, pharmacists, pharmacognosists, bacteriologists, etc. These men were restive and ambitious to have a share in the larger responsibilities of American pharmacy. They represented a breath of fresh air, their methods being the very antithesis of the old "question and answer" method that had prevailed in much of the formal pharmaceutical education of the past.

Shortly before the 1920 convention, a group heretofore not influential in U. S. P. affairs determined to give these men some opportunity in pharmacopœial work if possible to do so. The spirit of the adage, "Possession is nine-tenths of the law," became very apparent when it was known that such action was contemplated. How-

ever, when the convention opened, it was evident to some of the wiser heads among those in control, that there was widespread interest in injecting new life into the enterprise. As we recall the events of that occasion, it was Dr. J. M. Francis, then chief chemist of Parke, Davis & Company, who, with almost an uncanny insight into what was going on in the minds of those who were regarded as outsiders, proposed a plan for the selection of the pharmacy members of the Revision Committee that seemed wise and fair to all parties concerned.

A small committee of five, as we recall it, was selected to bring to the convention floor pharmacy nominees for the Revision Committee. Its personnel was as follows: James H. Beal, C. H. LaWall, John Culley, we think S. C. Henry, and W. F. Rudd. After an all-night session, at which a rather liberal attitude was manifested, a list of nominees was agreed upon, and many names new in revision work were on it. The list was approved largely, if not wholly, as submitted. Among the men coming into the work for the first time were: Doctors DuMez, C. W. Johnson, Youngken, Kelly, Murray; Deans Jordan, Bradley and Havenhill; and Professor Gathercoal. The influence that these men have exerted in American pharmacy during the years that have passed since that time is ample evidence of the wisdom in bringing them into pharmacopœial affairs two decades ago.

The story would not be complete without the statement that this action seemed to be viewed with considerable concern if not alarm by many whose professional reputations and private income had been closely allied with their pharmacopœial connections.

The years from 1920 to 1930 saw greater activity in U. S. P. affairs than had obtained in previous revision periods. Indeed, in the early 20's it was evident that there was developing a feeling that by the 1930 convention the struggle between those in control and the university groups, who were by that time leading in pharmaceutical

education, would probably grow into a real contest for progressive policies. Those who attended the 1930 meeting were keenly aware of the tense feeling that was manifest throughout the convention. Nominees for the Revision Committee, as presented to the convention, were elected almost without a change in the ticket. Even to those who were mere tyros in convention politics, the election of this group seemed to indicate the selection of a new revision chairman, not because the former chairman had not done very good work, but because it was believed by a large number of delegates that the new candidate possessed a rare background of education, efficiency, experience and general fitness for the work possessed by few men in American pharmacy.

And then two strange things happened. In the first place, less than two hours before the Revision Committee was to meet for organization, it was reported to the new candidate for the chairmanship by a friend of the former chairman that the former was thought by the medical members to be the candidate of the patent medicine interests of the country, and that if he were elected to the chairmanship the medical members of the committee would withdraw their support from the Pharmacopœia. Naturally, this was a bomb in the camp of those working for a change, and to risk such a break between medicine and pharmacy was not justified although the implication which the rumor conveyed was thought to be false from the beginning. The U. S. P., we thought, was far more important than any individual. Time for tracing this rumor to its source and proving it false was not available. The embarrassment produced by this occurrence cannot be described in this paper.

The second strange incident was absence from the organization meeting of the Revision Committee of several of those who previously had been most active for a new chairman. Why this happened is, after ten years, still not understandable to those close to the situation at that time. That these two incidents completely changed the picture for a decade can hardly be doubted

by those well acquainted with the situation that obtained in May 1930.

A far-reaching bill to better control the manufacture, advertising and sale of foods, drugs and cosmetics was introduced as Senate Bill 1944, just four years after this Washington meeting. At the annual convention of the National Drug Trade Conference in December 1934, Senator Copeland's bill was the chief subject of discussion. Opposition of the most bitter kind to this measure was led largely by some of the same group that had opposed most strenuously the changes in the control of pharmacopœial affairs. Indeed, it was stated on the floor that those who drafted the bill were attempting to prevent the lay public from buying an aspirin tablet without a physician's prescription. It was at this time that deans and faculty members of the university schools of pharmacy, first as individuals and later the American Association of Colleges of Pharmacy as an organization, threw their influence wholeheartedly with the patrons of the bill and with the officials of the Food and Drug Administration.

A strong central committee was appointed from the American Association of Colleges of Pharmacy which, in turn, elected auxiliary members from every state in the union. All through the changes and vicissitudes of this measure, until its passage as S-5 in mid-summer of 1938, the full strength of those who but four years earlier were charged with attempting to prostitute the U. S. P. to the patent medicine interests was used to develop in every possible way sentiment favorable to the control of these same patent medicine interests and in behalf of the public welfare. We are constrained to observe that a more anomalous situation could hardly be imagined.

And now what of the 1940 convention, and plans and policies for the twelfth revision? In a communication from Chairman Beal of the U. S. P. Board of Trustees, dated August 3, 1939, occurs this significant statement:

"As you are doubtless aware, the present Revision Committee some years ago adapted the policy of continuing revision. In other words, after U. S. P. XI had been issued, the work of preparing for the

ext revision was taken up. Part of this work has been presented in Supplement No. 1, and an additional portion will be presented in Supplement No. 2, now almost ready to appear. As a result of this continuous work the Revision Committee expects to present at the 1940 Convention, the nearly complete manuscript copy for the issue of U. S. P. XII.

"If the plans of the Revision Committee work out successfully, the next new Pharmacopœia should appear in not much more than a year after the 1940 Convention."

Apparently something has happened to inject new life into the organization. Further, for the first time in its history so far as we are able to learn, the Board of Trustees have seen fit to give the pharmaceutical public a personalized financial statement covering the past nine years. This, along with a report of the work of the Revision Committee, has gone to all members of the 1930 convention, and will go to all of the 1940 delegates. These reports have been published widespread in the pharmaceutical press. We suggest that you study carefully the financial statement. It is full of interesting data.

If there are those present as delegates at the next convention who, for the sake of personal or group advantage, attempt to drive a wedge between pharmacy and medicine as was done in 1930, we believe they will be denounced bitterly from the floor.

That medicine and pharmacy should work together harmoniously and enthusiastically for the making of the most scientific, accurate and useful pharmacopœia possible is the one objective toward which all groups should direct their efforts. If, in doing this, it should appear wise to the convention members to make changes in the personnel of both administration and revision committee groups, may all of us keep clearly before us this one fact, namely: that the U. S. P. belongs to no one individual or group of individuals, but to all the health service professions and, through them, this century-old book of standards belongs to all the people for the protection it brings to every man, woman and child in this country.

Mr. Otto Frank, pharmacist, of Cudahy, Wis., has been named president of the Cudahy State Bank.

Educational Drive Against Venereal Diseases

The following release has been received from the State Department of Public Health and we urge you in all sincerity to give your fullest coöperation and secure your certificate of coöperation. Our new laws, if properly administered, will go a long way to eradicate venereal diseases:

"California druggists are being offered certificates of coöperation in an educational drive launched in February by the State Department of Public Health to stop self-treatment of venereal diseases.

"Started in Oakland where the first certificate was presented to William J. Peterson, President of the No. Calif. Retail Druggists' Assn., and proprietor of the Piedmont Pharmacy, the drive will be extended throughout the state

"Personal calls will be made upon druggists, and firms which pledge not to sell medicines for syphilis or gonorrhea except on order of a physician's prescription and to refer all patients to a doctor or clinic will be given a certificate of coöperation

"Coöprating in the drive are the Southern and Northern California Retail Druggists' Associations, the State Pharmaceutical Association, the Pharmacists Union and the State Boards of Pharmacy and Medical Examiners."—*Bulletin Southern California Retail Druggists Association*

The Association for the Advancement of Professional Pharmacy

A combined Business and Social Dinner-Meeting was held at the Hotel Empire, January 27th, attended by over 200 members and guests.

The topic of the meeting was particularly presented for the Hospital Pharmacy members of the A. A. P. P. and was on "The Hospital and the Professional Practice of Pharmacy." This talk was presented in a most interesting manner by Dr. E. L. Harmon, Director of Grasslands Hospital, White Plains, N. Y. Dr. Harmon stressed that pharmacy's association with hospitals involves more than a physician-pharmacist relationship. It represents a direct association with all departments and individuals who are a part of such institutions. The hospital pharmacist's duties bring him in contact with administrators, physicians, surgeons, dental surgeons, nurses and also patients in hospitals maintaining an out-patient department. He also mentioned that at no time has a more favorable hospital relationship existed than that of the present. The American Hospital Association is definitely interested in the advancement of present hospital pharmacy. They have a standing committee which has been very coöperative in developing interest among their members. Following Dr. Harmon's interesting talk, Dean Charles W. Ballard of Columbia University College of Pharmacy and Dean James H. Kidder of Fordham University College of Pharmacy responded.

Edward Kremers Testimonial Banquet

Honoring His Sixty Years of Service to Pharmacy

Representatives of the three main branches of pharmacy in Wisconsin, namely, the State Association, the College of Pharmacy and the State Board of Pharmacy, have arranged for a fitting Testimonial Banquet to honor Dr. Edward Kremers, who is now Director Emeritus of the College of Pharmacy, and president of the State Board of Pharmacy. The occasion of the testimonial will be Dr. Kremers' 75th birthday and also the culmination of sixty years of continuous service to Wisconsin pharmacy. Over fifty of these sixty years were spent at the university, almost forty of them as Director of the Course in Pharmacy. This event, the first of its kind in the history of pharmacy in Wisconsin, will be held at the Memorial Union, University of Wisconsin, Madison, on April 4th.

Born in Milwaukee, his apprenticeship years were spent in the drug store of Louis Lotz, a master who had studied under Liebig, Buchner, Kobell, Pettenkofer and other outstanding European professors.

In 1884 and 1885 he attended the Philadelphia College of Pharmacy and Science. He studied at the University of Wisconsin from 1885 to 1888. Later he studied abroad under some of the masters whom he had long admired. He received his Ph.D. degree from the University of Göttingen, in Germany, in 1890.

On his return, he taught at the University of Wisconsin under F. B. Power, then Director of the Course in Pharmacy. When the latter left to become Director of the Wellcome Research Laboratories in England, Dr. Kremers succeeded him. This was the beginning of a tenure which lasted over fifty years, ending in his automatic retirement five years ago, at the age of seventy. Since that time, he has continued his work at the Chemistry Building, to instruct a group of graduate students.

Therefore, while Director Emeritus, he is still active as an educator, continuing to teach without compensation. His long and useful career has encompassed every phase of pharmacy from retail drug clerk to educator. As director of the Pharmacy Course, he was the first to establish graduate work in America leading to the degree of Doctor of Philosophy for research in plant chemistry or pharmacy. It is said that his influence in the pharmaceutical field has perhaps been greater than that of any other educator—through his graduates being on many pharmacy college faculties.

Dr. Kremers is intensely interested in pharmaceutical organizations. He is a Life Member of the A. Ph. A., has been chairman of many of its committees, and is now a member of the Pharmaceutical Syllabus Committee. It was under his initiative that the A. Ph. A. created the Section on History of Pharmacy.

Annual Report Federal Trade Commission

Fiscal Year Ending June 30, 1939

This report carries a great deal of information of interest to pharmacists. Attention is given here to certain activities of the Commission under the Wheeler-Lea amendment which has been in effect about eighteen months and which gives the Commission control over the advertising of foods, drugs, devices and cosmetics.

"Since enactment of the Wheeler-Lea amendment to the Federal Trade Commission Act the Chief Examiner's Division has completed 549 field investigations of alleged violations of section 12 prohibiting dissemination of false advertisements of foods, drugs, devices or cosmetics. Of this number, 298 represented new cases instituted by the Commission and which were handled in regular course, and 251 represented cases previously disposed of by the Commission but which were reinvestigated to determine (1) whether or not the prohibitions of orders to cease and desist entered by the Commission and of stipulations executed by advertisers and approved by the Commission, were being violated, and (2) whether or not other practices not prohibited under previous orders to cease and desist and stipulations, were being carried on in contravention of the amended act.

"Since approval of the amendatory act the Commission has issued and served 125 formal complaints alleging unfair and deceptive acts and practices through the dissemination of false advertisements of food (11 cases), drugs (63 cases), devices (12 cases) and cosmetics (39 cases). A total of 82 orders to cease and desist has been entered, preventing the further dissemination of false advertisements of food (5 cases), drugs (51 cases), devices (12 cases) and cosmetics (14 cases).

"Investigations by the Chief Examiner's Division have, since the effective date of the amended act, resulted in negotiation by the Chief Trial Examiner and acceptance and approval by the Commission of 65 stipulations executed by manufacturers and distributors of food (25 cases), drugs (12 cases), devices (12 cases) and cosmetics (16 cases), under the terms of which the parties agreed to discontinue using false advertisements in promoting the various commodities.

"At the close of the fiscal year the Chief Examiner's Division had under field investigation a total of 227 applications for complaint relating to alleged false advertisements of foods, drugs, devices and cosmetics. Of this number, 39 applications involved drug preparations which allegedly are injurious to health.

"Investigations have resulted in the granting of temporary injunctions and restraining orders by the United States district courts in 10 cases where such investigations revealed the dissemination of false advertisements of drug products which were found definitely to be of a dangerous nature and

injurious to the health of users when taken as prescribed, or under such conditions as are customary. These drug products included alleged cures for chronic alcoholism, obesity remedies or weight-reducing agents, and abortifacients and emmenagogues."

Radio and Periodical Advertising

"False and misleading advertising matter as published in newspapers, magazines, catalogs and almanacs and as broadcast over the radio is surveyed and scrutinized by the Commission Radio and Periodical Division

"The surveying of magazine and newspaper advertising was inaugurated by the Commission in 1929, and the surveying of commercial advertising continuities broadcast by radio was started in 1934. During the last year the survey has been extended to include mail-order catalogs and domestic newspapers published in foreign languages

"Each misrepresentation detected from this survey is carefully investigated; and where the facts warrant an informal procedure does not result in the elimination of misleading claims and representations, formal procedure is instituted. While many orders have been issued requiring respondents to cease and desist from the dissemination of false and misleading advertising, in a large majority of cases the matters have been adjusted by the advertisers signing stipulations to discontinue the misleading advertisements."

To illustrate the coverage, 220,760 advertisements appearing in newspapers and magazines were examined and 26,176 noted as containing allegations that appeared to be false or misleading; 643,796 commercial broadcast continuities, amounting to 1,384,353 pages of typewritten script, were read of which 29,143 commercial broadcasts were worked for further study.

Examination of current newspaper, magazine, radio and direct mail-order house advertising, in the manner described, has provided the basis for 75 per cent of the cases handled by the Commission through its Radio and Periodical Division during the fiscal year ended June 30, 1939. Information received from other sources or referred from other divisions of the Commission, and from other Government agencies, formed the basis of the remainder of this work.

An analysis of the questioned advertising which was assembled by cases and given legal review discloses that it pertained to the following classification of commodities in the proportions indicated

Name of commodity:

Drugs, including preparations recommended for the treatment of respiratory, sinus (asthma, headaches, colds, hayfever), blood, rheumatic, nerve system, ulcer, stomach and intestinal disorders, skin diseases (eczema, athlete's foot, etc.), emmenagogues,

women's ailments, laxative preparations, poultry and livestock diseases, weight reducing, cancer, tuberculosis, epilepsy, glands.	42 4
Cosmetics and toiletries	10.4
Food products (including beverages)	7 8
Health devices, instruments, apparatus and contrivances	2 1
Commodity sales-promotion plans, with agency and employment offers, and specialty, and novelty goods	6 8
Automobile, radio, refrigerator and other equipment lines	5 3
Correspondence courses	3 3
Other merchandise and industrial products, including apparel, tobacco products, pet breeding, poultry raising, gasoline and lubricants, specialty building materials, etc	21 9
Total	100 0

Drug preparations, cosmetics, health devices, and contrivances and food products accounted for 62 7 per cent of the advertised articles given legal review during the fiscal year.

In the item of drug preparations listed above, which comprised 42 4 per cent of the advertised products, a substantial proportion of the related advertising contained flagrant misrepresentations or representations which disclosed possible injurious results to the public and for that reason were given preferred attention.

Catalog of Squibb Ancient Pharmacy

So much interest has been shown in the contents of the Ancient Pharmacy now installed on the twenty-eighth floor of the Squibb Building in New York that a catalog of the collection has been published, in cloth binding and containing 190 pages. Catalog may be obtained from E. R. Squibb & Sons at \$1.00 per copy.

The new catalog was prepared by Dr. George Urdang in collaboration with F. W. Nitardy, Vice-President of E. R. Squibb & Sons, who have also contributed a series of articles on the Ancient Pharmacy to the historical section of the AMERICAN PHARMACEUTICAL ASSOCIATION and one of the trade journals. They have divided the collection into nine groups—Glass Containers, Mortars, Faience Ware, Wooden Containers, Miscellaneous containers, Franchises, Books and Manuscripts, Portraits and Illustrations, Items with a Religious Background and Balances, Utensils, etc.—and under these headings have briefly described each item. Photographs of 213 individual pieces as well as general views of the collection illustrate the text.

Admission to the Squibb Ancient Pharmacy, open each week day, is free to all who are interested. Pharmacists, members of the medical profession and their friends are cordially invited to visit it when they are in New York.

Control of Drugs and Drug Products in Maryland

The annual Report of the Board of Health includes a review of the activities of the Bureau of Foods and Drugs which is administered by a Commissioner and a Deputy Commissioner one of whom must be a registered pharmacist. Dr. R. L. Swain served as Deputy Commissioner for the year under review and had charge of the enforcement of the drug sections of the Maryland Food and Drugs Act, the Maryland Pharmacy Law, the Uniform State Narcotic Act, the Poison Law, the Barbituric Acid Law and the Bichloride of Mercury Act. He was assisted by an office force and by two full-time inspectors, both registered pharmacists.

To illustrate the scope of the work the following is quoted:

"Recognizing that drugs and medicines are indispensable in the maintenance of public health, the work of the Bureau is so organized as to keep in close touch with the conditions under which these products are manufactured, used and distributed. Several hundred drugs and their preparations are collected annually within the State. This activity is an effort to ascertain the quality of drugs and medicines so that they may be depended upon in the use to which they are put. The list is diversified so as to include the products used largely in compounding and dispensing physicians' prescriptions as well as the drugs and medicines usually referred to as household or domestic remedies."

The report states that during the year, 7166 inspections were made of drug stores, 278 inspections of drug manufacturing plants and 357 inspections of general stores.

"At each inspection the Inspector is instructed to check the professional personnel, pharmaceutical apparatus and equipment, poison and narcotic registers, and to secure such other information and impressions which have a bearing upon the observance of the State Pharmacy Law.

"In addition to inspections of retail drug stores, manufacturing and wholesale drug plants are inspected at frequent intervals. During the year 278 inspections of this character were made. At each inspection of manufacturing plants the Inspector is instructed to observe and report on general manufacturing facilities, the nature of the products being manufactured at the time of inspection, the name of the professional man or technician in charge of manufacturing operations, general sanitary conditions, together with all other facts which have a bearing upon the work being done.

"Under the Pharmacy Law, general merchandise establishments are permitted to handle patent and proprietary medicines and the commonly used household and domestic remedies and, therefore, the inspection of general merchandise establishments was carried on as a routine activity, and 357 inspections were made of this type of distributor.

"At each general store inspection the Inspector is

instructed to see that the drug products on sale are confined to those within the classifications listed above and also to see that no poisons or exempt narcotics are sold, and that the commonly used household and domestic remedies are labeled in accordance with the requirements of the law."

Quality of Drugs and Drug Products

During the year, 952 samples were purchased from drug stores, 368 samples from manufacturers and 108 samples from general merchants. These samples cover a wide range of products and were examined in the laboratories of the Bureau of Chemistry. In the order mentioned, 36, 8 and 8 of these samples were found not to conform with the standards, or a total of 3.6%. Of the samples purchased from drug stores and manufacturers, 3.3% were found to be substandard and of those purchased from general stores, 7.4% were found to be substandard. To illustrate the results secured by this type of inspection and control in reducing the percentage of substandard products, the following table was included.

Year	Per Cent	Year	Per Cent
1923	24	1931	5.3
1924	16	1932	5.3
1925	13	1933	6
1926	9	1934	4.4
1927	11	1935	4.1
1928	13	1936	3.3
1929	7	1937	3.9
1930	7.6	1938	3.6

"While the State Food and Drugs Act does provide for prosecution, the hearings required under the act have always been seized upon by the office as a means of stimulating a sense of responsibility on the part of both manufacturers and retailers, with the hope that from this awakened responsibility would come greater care in the preparation of drug products and that this care would manifest itself in a progressive decline in the percentage of substandard products encountered. That this has actually been done is not only a source of real gratification to the office but also reasonably good proof that the policy from which it has proceeded has been sound."

The Maryland Board of Pharmacy has charge of the registration of pharmacists, pharmacies and manufacturers in the state and of the issuance of state narcotic blanks.

The American Association of Museums will meet in Detroit, Mich., May 22nd to 24th. The Program includes visits to the Detroit Institute of Arts; The Edison Institute and Greenfield Village, Dearborn; the Cranbrook Academy of Art and the Cranbrook Institute of Science, at Bloomfield Hills; and the University Museums of the University of Michigan at Ann Arbor.

Honorary Members, A. Ph. A., 1939



John C. Cameron

Dr. John C. Cameron, a native of England, passed the Chemist and Druggist Qualifying Examination in 1920 and shortly afterward was appointed chief pharmacist to the Peking Union Medical College, Peking, China, where he has remained for the past twenty years. In 1926 he returned to London when he obtained his diploma as Pharmaceutical Chemist.

The Rockefeller Foundation built, equipped and staffed the Peking Union Medical College, and Dr. Cameron has travelled extensively in Europe, Asia, United States and Canada, with the object of obtaining information which might be useful to his Department in Peking. In spite of recent events in China the hospital is still functioning and has been extremely busy, especially when there was intense fighting in the Peking area. Dr. Cameron states, "Work in this part of the world during the past two years has been interesting, not to add exciting at times, and future prospects are shrouded in mist and fog, but we continue to hope for the best."

The Pharmaceutical Department at Peking Medical College not only includes a hospital pharmacy, which takes care of a 400-bed hospital, but an outpatient pharmacy where in normal times 500 prescriptions are dispensed six days a week; also a pharmaceutical manufacturing laboratory where all kinds of galenicals, ointments and solutions are prepared; an ampul section; a gas plant; a distillation unit; an analytical laboratory; a sodium nitrate laboratory; a chemical store room; etc. The Department functions 24 hours a day.

The Peking Union Medical College cost, roughly, \$6,000,000 and took four years to build, 1916-1920. It is the only medical institution in the world which

has been entirely supported by the Rockefeller Foundation for a period of twenty consecutive years. It is the leading medical college in Asia, the total staff numbering more than 1500. With the passing of the years the policy has been to replace foreigners with Chinese and to-day the total foreign staff does not exceed ten. Dr. Cameron has been a lone foreign pharmacist there since its opening, his staff having always been entirely Chinese. Before receiving his appointment in New York, it was Dr. Cameron's good fortune to gather experience in hospitals ranging from 4000 to 200 beds, in Scotland, England, France and Belgium, in temporary, field, base and general hospitals.

On his last visit to the United States Dr. Cameron found many young pharmacists interested in activities abroad, but so far as the Far East is concerned he states that now is not the time to think of going there. And, he adds, "if change is a mark of progress, then this area must be one of the world's most progressive spots." He also says, "each time we visit the United States we learn something new about hospital pharmaceutical technique. Sometimes it is better methods of preparing galenicals, sometimes more fool-proof methods of checking and dispensing narcotics, and so on." However, he continues, "hospital pharmaceutical problems are pretty much the same all over the world, at least so I have found in my travels."

Dr. Cameron is a member of the British Pharmaceutical Society, the Guild of Public Pharmacists, of London, The North China Pharmaceutical Society, and was elected to honorary membership in the AMERICAN PHARMACEUTICAL ASSOCIATION at its Atlanta meeting in 1939.

J. Thomann

Colonel J. Thomann, Chief of Army Pharmacists in Switzerland, was born in St. Gallen, April 30, 1872. In 1891 he began the practice of pharmacy in Zurich. In 1896 he passed the state examination and for a year practiced in Paris and Zurich. In 1897-1899 he was Assistant in Bacteriology and Hygiene, Bacteriological Institute of the E. T. H., in 1899, director of Philosophy, University of Zurich. In 1900 and 1901 he was Assistant in the laboratory on the Canton Chemist in Bern. In 1909 he was awarded a diploma as a chemist on foods.

In 1921 Colonel Thomann was elected as a member of the permanent Committee of the International Congress of Military Medicine and Pharmacy. In 1922 he was appointed as a member of the Pharmacopœia Commission as Administrator of Military Sanitation; in 1929 he was appointed a member of the Sub-Commission for revision of the Swiss Food Book, a member of the Commission for the study of new technicalities in sanitation materials, called into being from the International Committee of the Red Cross.

In 1933 Colonel Thomann was private lecturer on the Faculty of Medicine of the University of Bern.



in the worthy chapter of Galenical Pharmacy. In 1934 he was a member of the Scientific Experts Commission for the preparation of a list of surgical materials of the National Health Insurance Dispensary. In 1937 he was elected to the "experts" of the permanent Pharmacopœia Commission.

As an army pharmacist delegated *ex-officio* to the International Congress of Military Medicine and Pharmacy, instituted in 1921 and held every two years from that time, he has reported at the following conventions in the Military Pharmacy Section: Rome, Paris, Hague, Madrid, Bucharest and Washington, D. C. (1939).

He is an honorary member of the Swiss Pharmaceutical Association, the Spanish Pharmaceutical Academy, International Medical Club of America, Society of Pharmacy of Paris, Association of Military Surgeons of the United States and the AMERICAN PHARMACEUTICAL ASSOCIATION (1939).

Between the years 1897 and 1923 Colonel Thoma received the following military promotions: Lieutenant, First Lieutenant, Captain, Major, Lieutenant-Colonel and Colonel of Sanitation Troops.

Rudolf Wallner

In August 1939, when Dr. Rudolf Wallner of Tallinn, Estonia, celebrated his 60th birthday, many leaders of European pharmacy congratulated him by telegraph, the Finnish pharmacists sent a special deputation and honorary memberships were conferred upon him, including the AMERICAN PHARMACEUTICAL ASSOCIATION.

As a pharmacist, state official, editor and author, Dr. Wallner can look back on his long and busy career with the satisfaction of knowing his work well

done. During the last twenty years Estonia has enacted a number of reforms in pharmaceutical education and the drug business in general, which have made Estonian pharmacy one of the most modern in the world. Credit for this chiefly goes to Dr. Wallner. During his twelve years as the highest administrative officer on pharmaceutical matters in the Ministry of Public Health he has been the most influential instrumentality in effecting these reforms.

Dr. Wallner's published articles, reviews and scientific papers can be counted by the thousand and have been published in six different countries. In the March 1936 issue of this JOURNAL appeared "Estonian Pharmacy Forges Ahead," and for the Atlanta convention he presented "International Federation of Pharmacy, Observations and Impressions." He is author of a number of books, one of which is "Manuale Pharmaceticum." For eight years he was editor of "Pharmacia," and among his contributors were Perrot, Goris, Tschirch, Thoms, Urdang and Rojah.

In the creation of such organizations as "The Estonian Pharmaceutical Association," "The Association of Estonian Apothecaries," "The Association of Scientific Pharmacy" and "The Estonian Finnish and Hungarian Pharmaceutical Association," Dr. Wallner has had a lion's share. He has served in many positions of trust, the latest of these being as delegate to the Congress of the International Federation of Pharmacy, in Copenhagen, on which he reported to the Atlanta convention.

Dr. Wallner lives at Narva maantee 24, Tallinn. He is happily married and father of a talented daughter who is studying pharmacy at the University of Tartu.



The Prescription Volume in the Average Independent Drug Store*

By Joseph J. Shine†

In order to be better acquainted with the average independent drug store certain elementary figures should be given. First, it does a total volume of \$54.76 a day or \$19,987.00 annually which are rounded out in this paper to \$55.00 and \$20,000.00. The average drug store, including independents and chains, does \$65.75 a day or \$24,007.00 annually, while the chain unit on an average does \$243.84 daily or \$89,000.00 annually.

These figures were given through the courtesy of the A. C. Nielsen Company, Mr. Harry S. Noel of the Eli Lilly Company, the United States Department of Commerce, the *Saturday Evening Post* and the *Scripps-Howard* newspapers. The following breakdown of the average independent drug store represents the average of the five largest surveys made in recent years as to departmentization of volume in stores, the volume and the percentage of gross involved in each unit. In order to have an eye picture of the departments involved and the proportion of the volume they do, they will be reviewed as they are usually located in an average drug store.

The first department which we are greeted with is the Cigar and Cigarette Division, which includes pipes, smokers' equipment and many other miscellaneous items. This represents 20% of the volume of the drug store, or \$11.00 a day in the cash register. On an annual basis it produced \$4000.00.

Right directly across from this department we have the second department of the average drug store and strange as it sounds, it is the biggest department of a drug store. That is the Soda Fountain which is responsible for 25% of the average volume or \$13.75 a day or \$5000.00 worth of business annually. Professional dignity is somewhat lowered where it is necessary to dispense a chocolate soda, but still the dividends are big from this particular department.

The third important department of the drug store and the most important from the professional standpoint, and in fact, the legitimate excuse that we have for operating a drug store, is the Prescription and Crude Drug Department, which represents 15% of the total volume, \$8.25 a day, or \$3000.00 annually.

The fourth, and the next important department of a drug store, is the Patent Medicine Section, which is responsible for 13% of the average volume, \$7.15 a day, or \$2000.00 annually.

The fifth department, in importance, is the Cosmetic, Dentifrices and Toiletries Department, which represents 8% of the total volume, \$4.40 a day, and \$1600.00 annually.

The sixth in line is the Sundry Department of the store which represents 6% of the drug store volume, \$3.30 a day, or \$1200.00 annually. I might mention that out of the 6%, 3% is involved in the sale of photographic materials.

The seventh department is the Candy Department with 5% of the volume, \$2.75 a day, or \$1000.00 annually.

The eighth department is the so-called Control Line of the drug store that carries one of the plus selling lines of the unit. This is responsible for 3% of the total sales, or \$1.65 a day, and \$600.00 annually.

The ninth department is the Surgical Dressing and Hospital Supply Department which includes all surgical dressings, rubber goods, granite ware, hypodermic needles and syringes, etc. This is responsible for 3% of the volume, \$1.65 a day or \$600.00 annually.

Finally, we have the new addition to the drug store departments known as the Vitamin Section, wherein the average druggist has 2% of his volume, \$1.10 a day, or \$400.00 annually.

There you have the one hundred per cent average independent retail drug store. Compared with the figures of the chain and indicate units, you can readily see the

* Presented before the Section on Practical Pharmacy and Dispensing, A. P. H. A., Atlanta meeting, 1939.

† No. 77 W. Washington St., Chicago, Ill

is not anywhere near in correspondence with that of the larger multiple units.

Each of these departments should be studied to learn why the chain and syndicate units are successful in handling several thousand customers a day to the average independent unit's 273, but this paper is devoted to statistics of the Prescription Department of all drug stores as follows:

Type of Store	Number	% U. S.	Prescriptions Filled %	
			U. S.	Total
Independents	42,079	79.1%	76.7%	
Mutual & Coöp. members	7,581	14.3%	14.4%	
Chains (Corporate)	3,499	6.6%	8.9%	
TOTAL	53,159	100 %	100 %	

Although the chain units do 23.2% of the total volume of the retail drug industry they do but 8.9% of the prescription volume and 64% of all chain store users are potential customers for the independent prescription service. This certainly speaks very highly of the average independent drug store.

In recent years a number of former prescription items have ceased to be classified in the prescription section. That is, they are not demanded by the consumer on a prescription blank. The greatest sale involved in this particular field is that of Insulin. The Insulin customer very rarely receives a prescription for the first vial of a very potent biological, but is told to buy a vial at the drug store and from then on becomes a forty-eight times a year customer to a prescription section with no record on the prescription file. There is hardly one drug store that does not have a number of Insulin users in the neighborhood. In this same classification there are Ephedrine, Liver Extracts, Vitamins, Adrenalin and many others.

Now, what are the sales opportunities of the average independent druggist? The average independent druggist serves 555 families in his territory, computed on the basis that the average family spends \$36.00 in the drug store annually. The family ratio as to persons varies in a number of states, but the prescription ratio is greatest in the southern part of the country where the prescription volume is almost double that of the Eastern, Central and Pacific sections. This

is because dispensing by physicians is practically unheard of in the south.

The average family purchases 3.3 new prescriptions annually and since the average refill statistics show approximately one out of three, the total per family is approximately 4.1 prescriptions a year. Thus, the average drug store has a volume of 2436 prescriptions to fill yearly. The cost involved in these prescriptions varies greatly between rural communities where prescriptions are cheap and metropolitan areas where prescriptions are more expensive. The variation is from an average of 72¢ rurally to \$1.09 in the metropolitan areas, and 84¢ is the most dependable for the drug store average.

To further substantiate this information, the A. C. Nielsen Company recently made a national survey by the Gallup Method of Sampling. Their figures are recognized by national manufacturers as being the most authentic. They show that the average drug store did 91 new prescriptions per thousand dollar volume in the year 1937-1938. Thus, our \$20,000.00 average drug store was entitled to 1820 new prescriptions and with the same ratio of refills would come very close to fitting the picture of 2427 prescriptions and with the cost of 84¢ would give them a volume of \$2038.00.

The inventory of the average drug store's prescription department approximates 20.5% of the total inventory of the store. There is very little change in ratio until the store fills from 20 to 40 prescriptions a day and then the prescription inventory increases to approximately 30%. When the prescription volume is from 40 to 100 prescriptions a day the ratio drops back to 24.5%. When the inventory in the average store is approximately \$5000 a figure of \$1025.00 can be taken as the average inventory for the prescription department. Thus, with a volume of \$2038.00 gross and a cost of 50%, the average independent's prescription inventory turns over once annually. Incidentally, the inventory figure is growing annually because of the new and unusual specialties of manufacturers that have such an unusually high wholesale price. Therefore, at the present

time, Mr. Average Druggist has an inventory turn over once a year with a gross profit of \$1019.00.

This department can be merchandised through a further development of individualized medication. This program is not one of an individual or an association, but one of an entire industry all branches of which (pharmaceutical manufacturers, wholesaling institutions and all associations) should enter into. Each and every druggist should be willing to sacrifice some time toward the profession that gives him a living and see that he never misses an opportunity

in any public gathering whether Rotary, Lions, Kiwanis, Commercial clubs or Ladies' clubs, etc., to tell the story of individualized medication as it is still good common sense that a prepared stock cough syrup cannot possibly be successful in the case of a baby, child and adult. The fact should be stressed that only the doctor who has made a thorough examination and knows the physical condition of the patient, can prescribe individually for his ailment and particular condition with the greatest benefits. By so doing we can effectively uplift the prescription department.

Red Cross Enrolls Medical Technologists

At the request of the Surgeon General of the Army, and in compliance with its policy of coopération with both the Army and Navy, the American Red Cross, as an expansion of its peace-time service for the military forces, has undertaken the enrollment of various types of medical technologists who are willing to serve in the medical departments of the Army and Navy if and when their services are required at the time of a national emergency.

Qualifications for Enrollment

Chemical Laboratory Technicians (male).
Dental Hygienists (male and female).
Dental Mechanics (male).
Dietitians (male and female).
Laboratory Technicians (male and female).
Meat and Dairy Hygienists (Inspectors) (male).
*Nurses (male).
Occupational Therapy Aides (male and female).
Orthopedic Mechanics (male).
Pharmacy Technicians (male and female).
Physical Therapy Technicians (Aides) (male and female).
Statistical Clerks (male and female).
X-Ray Technicians (male and female).

General Qualifications for Enrollment

1. Citizens of the United States.
2. Ages 21-45 years (Army); 18-35 (Navy—men only).
3. Physically qualified. Applicants must pass a satisfactory physical examination, accord-

ing to standards set respectively by the Army and Navy Medical Departments.

4. Women applicants must be unmarried.
5. All applicants must express a willingness to serve as a technologist in time of a national emergency.

Male technologists will be eligible for enlistment in the Army as non-commissioned officers in the grades of sergeant, staff sergeant or technical sergeant. Women technologists, and men who do not qualify physically, will be eligible for employment by the Army as civilians.

For the Navy, male technologists will be eligible for enlistment in the Naval Reserve as Petty Officers—Pharmacist's Mates 3rd, 2nd and 1st Class and Chief Pharmacist's Mate (acting appointment). Women technologists are not eligible for service in the Navy under present plans.

The Medical Department of the Army will require a considerable number of technologists in each of the above-named groups. The Navy Medical Department requirements will be similar except for dietitians, occupational therapy aides, orthopedic mechanics and dairy and food hygienists (inspectors) who will not be needed. Notwithstanding the maintenance of this enrollment, the Navy also desires peace-time enlistment in the U. S. Naval Reserve, and male technologists who wish to enlist in the Naval Reserve are urged to communicate direct with the Commandant of the Naval District in which they reside. The address of their Commandant will be furnished upon request.

Technologists who qualify according to these general standards and who are willing to enroll for service as outlined above should communicate with The American National Red Cross, Washington, D. C.

* This group will not be members of the Army or Navy Nurse Corps which under basic law are limited to females, but will be used as technologists for service auxiliary thereto.

Local and Student Branches

ALABAMA POLYTECHNIC INSTITUTE STUDENT BRANCH.—The regular meeting was held October 9, 1939, opened by President Hiller. After roll call the minutes of the preceding meeting were read and approved. The president then introduced two new members, Messrs. Musgrove and Godard.

Mr. Eich made a report for the Committee on Plans for National Pharmacy Week, stating that several displays pertaining to professional pharmacy would be made in local drug stores.

Mr. Lurie reported for the Committee on Science and Practice of Pharmacy, bringing out the action and use of several drugs appearing in the *Professional Pharmacist*.

It was decided that the Juniors and Seniors would visit the plant of Eli Lilly & Co. some time in March.

President Hiller announced that Pharmacy had a panel in the *Glomorata* in the past and suggested that this be discussed. It was moved and seconded that the Branch obtain a panel, and the secretary was instructed to prepare a list of the members and turn it over to the *Glomorata* office.

Professor Hargreaves then introduced Mr. Wheat, manager of the Arcade Pharmacy in Columbus, Ga., who spoke on "Salesmen," stressing honesty, dependability and accuracy. A vote of thanks was accorded the speaker.

The Branch met November 19th, meeting opened by Vice-President Barron. Roll was called and minutes of the previous meeting read and approved.

Mr. Croxton reported that the students would visit Eli Lilly & Co. just after the spring holidays.

Vice-President Barron stated that plans should be made for the annual dance. A committee was appointed, and it was announced that since a dance would cost about \$100 a party should be held instead. This was referred to the committee.

Mr. Cox suggested that a membership drive be staged and that one member from each class be appointed to sponsor same.

On November 26th the meeting was opened by President Hiller. After roll call and approval of the minutes, the meeting was turned over to the Program Committee. Miss Mitchell gave an interesting reading.

Mr. Lurie moved that the Branch undertake the reestablishment of the college dispensary whereby the student prescriptions might be filled free of charge by the dispensary to be operated by the Seniors under the supervision of the faculty. Motion not passed.

Mr. Barron moved to amend Article 4 of the By-Laws to read, "The meetings of the Student Branch,

A. PH. A., will take place on the second and fourth Mondays of each month at the appointed time and place," vote to be taken at next meeting.

Mr. Swift reported for the Dance Committee and a vote in favor was received.

Mr. Lurie moved that the Branch sponsor the *Auburn Pharmacist* so that the paper might relate more to the student activity.

The meeting opened on December 11th. After roll call and the reading of the minutes Mr. Barron called on Dr. Blake to introduce the guest speaker, Mr. Middlebrooks, who is Federal Narcotic Inspector in the district. He discussed the provisions of the Federal Narcotic Act, and at the conclusion of his talk answered questions concerning enforcement.

BEN EICH, Secretary

CITY OF WASHINGTON.—The second meeting was held at 8:00 P.M. on February 19th, in the Institute of Pharmacy. The minutes of the December and January meetings were read and approved. President Kenneth K. Kelly presided. A treasurer's report was submitted and read by President Kelly, informing the members of a balance of \$151.32.

In the absence of the chairman, Paul Reznick, Dean W. Paul Briggs gave the report of the Program Committee. For our next three meetings the following are planned: a discussion of some phase of "Practical Pharmacy," a talk on "Sulfapyridine" and to have a member of the Social Security Board speak on "Public Health Insurance."

The guest speaker was Mr. James A. Horton, Chief Examiner of the Federal Trade Commission, whose topic was "Advertising—Its Modern Concept in Relation to the Advertising of Foods, Drugs, Cosmetics and Devices." In the address it was pointed out that the Federal Trade Commission feels that from the new restriction on advertising benefits will be derived by both the consumer and business. It was also mentioned that advertising must be based on scientific fact; the advertiser is responsible for the content of the ad; and he is also accountable for information withheld about a product. A motion that a rising vote of thanks be given to Mr. Horton was carried.

After a recess Mr. L. E. Warren read the proposed new Constitution and By-Laws pointing out the changes made from the old one. He made a motion to place the new Constitution before the members for discussion and to be voted on at the next meeting. Motion passed. He also made a motion to table Dr. Hilton's motion until the Constitution is considered. Motion carried. Mr. Warren made a motion to send a copy of the Constitution and By-

laws to all members in the next ten days. Motion carried.

CHARLES O. WILSON, *Secretary*

FERRIS INSTITUTE.—The annual banquet was held February 22, 1940, in the Methodist Club Room. The Branch invited as its guests of honor the members of the Michigan State Board of Pharmacy and Mr. E. J. Parr, Director of Drugs and Drug Stores.

William T. McElwain, Dean of Men at Ferris Institute, served as toastmaster for the occasion. Selections by the Pharmacy Glee Club, and dinner music by Larry Owen, violin, and Lois Robinson, piano, were enjoyed during the dinner.

Members of the State Board of Pharmacy, namely President A. G. Buchman, Stewart Dodge, Dan W. Hauser, Orville Hoxie and H. J. Patterson, spoke briefly, giving the students interesting reminiscences of the days when they were in school. Dan W. Hauser talked about the "State Board of Pharmacy" and its activities. E. J. Parr, Director of Drugs and Drug Stores, gave an interesting and informative talk on "The New Food and Drug Law."

Following Mr. Parr's talk, the banquet closed by singing the Pharmacy song under the leadership of the Pharmacy Glee Club.

MORRIS E. FOCKLER, *Secretary*

LOYOLA UNIVERSITY STUDENT BRANCH.—The regular monthly meeting was held in Bobet Hall, January 11th, J. F. Thompson presiding.

Mention of a social in the near future, was made. Suggestions were advanced and the idea of a Mardi Gras or Masquerade dance seemed most acceptable. After this discussion was concluded the formal meeting began.

Mr. Irving A. Chauvin, sales representative for Abbott Laboratories, Inc., was the first speaker. He explained how proper detailing of the physicians would bring about real harmony between the pharmaceutical and medical professions. He declared that it is of utmost importance to the pharmacist to do detail work, and one of the most effective methods used by pharmacists who contact physicians is the creation of a "Doctor's Nook;" that is, a pleasant corner, with easy chairs, good lights and copies of the more important medical journals—a place where the physician can stop to rest between calls. He presented to the Loyola pharmaceutical museum a microscope which he used when attending our university in 1922. The presentation was made to the president of the Student Branch.

Lawrence F. Ferring, dean of the School of Pharmacy at Xavier University, spoke on the "Open Prescription Counter," declaring that it affords the most cogent means of advancing the prestige of the progress of pharmacy. Dean Ferring stated that "It brings into public view the years of training and of study so honestly entered into and acquired by the important link in the public health profession whom we familiarly call—the pharmacist."

At the December meeting, a bust of Aesculapius was presented to the Branch by one of the most beloved local pharmacists, Mr. Edward Wunderlich. In connection with this, at the January meeting one of our freshmen members, Miss Anna Persich, read a paper on the "History of Aesculapius." We learned that he is a patron of pharmacy, the emblematic god of healing, whose figure with the serpent appears on seals and charters of the profession of pharmacy.

The Current Affairs Committee submitted an excellent report. It was read by Miss Rosa Mae Poche, senior member and chairman of that committee. The report explained three national pharmaceutical awards: The Kilmer Award, the Fairchild Scholarship and the A. Ph. A. Research Award.

Mr. Nicholas Montalbano, vice-president, presented a scrapbook to the Student Branch. It contained material relating to the Atlanta convention of the A. Ph. A. The book was compiled from pictures, opinions, stories and news clippings collected by Mr. Leo Babin and Mr. Montalbano, chairman and secretary, respectively, of the first annual meeting of student branches held in conjunction with the annual convention.

At 7 45 P.M., in Bobet Hall, the February meeting was called to order. In the absence of our president, Mr. Nicholas Montalbano presided.

Under the heading of old business the subject of by-laws was considered. The by-laws which were drawn up by a special committee during the past summer have not been passed upon in their entirety, therefore a motion was made to call a special meeting to be held in conjunction with a social to accept the remainder of the by-laws. A majority of members was in favor of the motion and the time for such a meeting will be set in the next few days.

The first guest speaker of the evening, Mr. Albert P. Lauve, head pharmacist at Charity Hospital, gave a very interesting talk on "Sterile or Intravenous Solutions." He enumerated those which are most frequently used and explained how they should be properly filtered and protected from impurities as well as being cautiously sterilized. Mr. Lauve also explained the preparation of sulfanilamide in physiological saline solution for parenteral use. He said, "Trained pharmacists should know and be willing to take over the responsibilities of preparing sterile solutions."

Mr. Eugene Ayo, a senior member, read a very educational paper on "The History of Sulfapyridine." He told us that it is a drug which is in the experimental stage and still needs very careful supervision in its administration.

The last speaker of the evening was Dr. H. Dupuy, resident surgeon at Charity Hospital who spoke on "The Use of Sulfapyridine and Antipneumococcal Serum in the Treatment of Pneumonia." In his very vivid address he explained the bacteriostatic action of sulfapyridine and the hemo-

lytic action of antipneumococcic serum. Dr. Dupuy stated that pneumonia fatalities in the Charity Hospital have been reduced from 38% to from 3 to 8% by chemo- and sero-therapy. He also told us of a new drug which is still in its experimental stages and which is not yet on the market which has the same action therapeutically as sulfapyridine but is only one-fifth as toxic, its name is sulfamethylthiosol.

JUNE WARE, *Secretary*

MICHIGAN.—The January meeting which was held in the Wayne County Medical Building, Tuesday evening, the 23rd, was given over to a testimonial dinner attended by sixty, in honor of Dr. Justin L. Powers of the University of Michigan, recently appointed chairman of the National Formulary Committee. Immediately after dinner President H. A. K. Whitney called on the secretary to read the minutes of the previous meeting in order to make the evening official. These were approved. Mr. Whitney then paid tribute to Dr. Powers, saying that the splendid turnout—about one hundred—in itself was the best possible tribute that could be paid an individual.

The secretary was called upon and congratulated the honored guest in behalf of the membership of the Michigan Branch. He was followed by Dr. F. O. Taylor, vice-president of the A. Ph. A., who mentioned the fact that the presiding officer, Mr. H. A. K. Whitney, was to succeed him, having recently been elected to the vice-presidency. He said it was indeed an honor to Dr. Powers to become chairman of the N. F. Committee following such men as Diehl, Scoville, Gathercoal and others. He said, too, the appointment of Dr. Powers as a full-time chairman and editor of the N. F. Bulletin was an innovation and would prove valuable to pharmacy.

Tribute was also paid Dr. Powers by representatives of three accredited colleges of pharmacy in Michigan: Dean E. P. Stout, representing the Detroit Institute of Technology; Dean R. T. Lakey, representing the College of Pharmacy at Wayne University; and C. C. Glover, representing the University of Michigan College of Pharmacy, Ann Arbor.

Mr. L. A. Seltzer, for many years a member of the N. F. Committee, was called upon by President Whitney to give a history of the N. F. Committee. He stated, "I have been asked to speak on 'The History of the National Formulary.' Instead, I think I shall direct my remarks to the changing functions of the Formulary."

President Whitney assured Dr. Powers that members of the Michigan Branch stood ever ready to assist him in his arduous task that he is about to undertake. He also mentioned that Mr. C. E. Watts, another member of the Branch, and for a number of years assistant to Mr. Whitney at the University of Michigan Hospital, had just been

called to take charge of the Pharmacy Department in St. Luke's Hospital, New York City.

Mr. R. L. McCabe extended his personal felicitations to Dr. Powers and said he hoped that he, a member of the Michigan Branch at the headquarters in Washington, will exert his best efforts and influence to bring the 1941 A. Ph. A. Convention to Detroit.

Mr. Seltzer then moved that, in tribute to contributions of Dr. Powers to the Michigan Branch the members vote him an honorary membership in the Michigan Branch; the motion was seconded and adopted unanimously.

Mr. Webster, chairman of the Interprofessional Relationship Committee of the D. R. D. A., congratulated Dr. Powers and wished him success in his new endeavors.

Mr. Whitney thanked the members for their splendid cooperation in making this testimonial dinner an outstanding event.

BERNARD A. BIALK, *Secretary*

NEW YORK.—The regular meeting was called to order by President Hauck at 8:45 p.m. on Monday February 19th, at the Columbia University College of Pharmacy. Due to inclement weather the attendance was only 80 members and guests. Minutes of the January meeting were approved and read.

Mr. Robert Lehman read the report of the Committee on Education and Legislation, which was accepted and ordered attached to the minutes. Dr. Cosmo Ligorio read the report of the Committee on the Progress of Pharmacy and it was accepted and ordered attached to the minutes.

There being no further business the meeting turned to the Scientific Section with Mr. Gustav Bardfeld as chairman. Mr. Bardfeld introduced the speaker of the evening, Dr. Henry Doubilet, Assistant in Surgery, New York University and Instructor in Gastroenterology, Columbia University, who discussed "Recent Clinical Trends in the Treatment of Liver and Gall Bladder Diseases." The talk was accompanied by a moving picture and numerous slides. At its conclusion a rising vote of thanks was extended.

HORACE T. F. GIVENS, *Secretary*

NORTHERN NEW JERSEY.—The meeting was held at the New Jersey College of Pharmacy building in Newark, January 23rd. Dr. Paul C. Olsen spoke on "The Problems of Drug Store Management." He outlined many factors that need be taken into consideration when determining whether a given neighborhood will support a drug store, and the type of drug store best suited for that neighborhood. If it is determined that the location is suitable, problems of finance, buying, arrangement of the stock and personnel are to be considered. "Inventory and accounting," said the speaker, "often can prevent the failure of a store, or explain why the store failed."

uestions were invited from the floor and some interesting discussions followed. Mr. Charles Jash was asked for some comments from the lesaler's view point. He said over-buying and proper accounting were among the more frequent rs committed in drug store management.

The regular meeting was held at the New Jersey College of Pharmacy at Newark, New Jersey, February 19th. Dr. James C. Munch spoke on the topic, "Keeping Up with Research." Dr. Munch likened pharmaceutical knowledge to a indulum. We discover a medicinal substance and t up our facts concerning this substance. Then c proceed to tear down and deny all of these facts ad set up new facts. By the time this is done the rug becomes passé and is forgotten in the discovery f a new drug, then the cycle begins anew. Later e return to one of these drugs and pass through the aring down and rebuilding cycle. The history of ese cycles was illustrated by many drugs, viburnum, ad liver oil, bismuth, iron, etc.

Sandwiched in with this theme was a review of the sults of recent researches in pharmacology. Fol- owing the talk many interesting questions from the oor were answered.

C. L. Cox, *Secretary*

NORTHWESTERN.—The Northwestern Branch ok advantage of the presence of a number of guest cturers participating in the 4th Pharmaceutical stitute at the University of Minnesota in arrang- ing programs for the following four meetings of the ranch. The meetings were held in the auditorium f the College of Pharmacy, University of Minnesota ad were largely attended by Branch members, udents and guests. No business was transacted at ay of the meetings.

February 5th, 9:30 A.M. Lecture: "Professional Pharmacy," by Dean W. F. Sudro, College of Pharmacy, Fargo, N. Dak.; February 5th, 1:30 P.M. Lecture: "Pharmaceutical Service to Hospitals," by Prof. Louis C. Zopf, College of Pharmacy, Univ. of Iowa; February 6th, 11:30 A.M. Lecture: "Public Opinion as an Aid to Professional Pharmacy," by Dr. Robert L. Swain, Editor of *Drug Topics*, New York City; February 7th, 10:30 A.M. Colored Motion Picture Presentation and Lecture: "Treatment of Pneumonococcal Pneumonias with Sulfapyridine and Antipneumococcic Sera," by Dr. F. E. Schmidt (Lederle Laboratories), Chicago, Ill.; Colored Motion Picture and Slide Presentation and Lecture: "Recent Advances in the Field of Barbiturate Medication," by Dr. D. L. Tabern (Abbott Laboratories), Chicago, Ill.

CHAS. V. NETZ, *Secretary*

PHILADELPHIA.—The February meeting was called to order by Chairman Osol at 8:20 P.M. on Tuesday, February 13th, at the Philadelphia Col-

lege of Pharmacy and Science. Minutes of the January meeting were read and approved.

Mr. Drain, chairman of the membership committee, nominated and the body elected Messrs David and Herman Blumenthal to associate membership.

Professor Nichols announced the program for the balance of the year: Dr. Roundtree is to speak at the April meeting on the "Chemical and Clinical Studies on Adrenal Glands," and Mr. D. B. Strohm of the Aluminum Co. of America will discuss "Aluminum" at the May gathering.

Dr. Osol appointed Mr. Riesch chairman, and Professor Nichols and Dr. Eby members of the nominating committee, to report at the next meeting.

Mr. Simpson was requested to present an audit of the books, closing the year.

Professor Osol introduced Mr. James J. Moran of the Kimble Glass Company. Mr. Moran's interesting lecture covered the manufacture, standardization and use of glass. The speaker used slides in conjunction with the talk to show errors that may occur in the graduation and use of instruments and how these may be avoided or overcome. A movie, taken at the Vineland plant, showed the various steps in the manufacture of scientific glassware. Interest was shown in ampul and amber glass in the discussion that followed.

A rising vote of thanks was accorded the speaker

RUDOLPH H. BLYTHE, *Secretary*

ST. JOHN'S UNIVERSITY STUDENT BRANCH.—A meeting was held at the College, February 2nd, with two hundred present.

Mr. Lester Rosenstein presented to the assembly a list of Research Problems for students sent to the Branch by E. N. Gathercoal, Chairman of the National Formulary Committee. All students interested were to decide the topic upon which they wish to gauge their interest and arrange to begin active work Saturday, February 9th.

The Dean, Dr. Dandreaux, then introduced the speaker, Dr. Edwin Grace. His topic "The Biology and Diagnosis of Cancer," was greatly appreciated by all. Dr. Grace, an eminent research worker in his field, formerly studied at the Mayo Clinic in Rochester and is now director of the Grace Clinic in Brooklyn.

Dr. Grace's address was concerned with the fundamental cellular disruption which occurs in cancer. He explained that this condition is chiefly an unrestricted reversion of the growth of the cell from the normal to embryonic state. Using the Carrel-Lindbergh technique cancer cells obtained from benign and malignant tumors had been grown. The growth of the cell in the culture was directly proportional to its fatality. Work of this type has made it possible to classify four general stages of tumor. These types, as also the differentiation of the cell, such as the highly altered nucleolus ratio and enlargement of the argentophilic bodies

the nucleolus, were graphically illustrated by slides. Treatment of cancer, Dr. Grace explained, is directly dependant upon the state of the disease. Benign tumors, where the growth of the cell is somewhat restricted and does not spread as rapidly, are not as deleterious as the malignant or fourth type tumor where the cells grow wildly. Even X-Ray treatment has not always been successful, in that, not only the cancer cell but also the scar tissue, the defensive setup of nature, is destroyed. For this reason Dr. Grace emphasized that cancer must be checked in its early stages.

Following a summation of how far advanced cancer research actually was, Dr. Grace answered the many questions from the audience. The Chairman, on behalf of the group, thanked Dr. Grace for his enlightening lecture and illustrations.

The following officers were elected: *President*, L. Rosenstein; *Vice-President*, S. Mostofsky; *Secretary*, Sister M. Etheldreda; and *Treasurer*, A. Moskowitz.

SISTER M. ETHELDREDA, *Secretary*

THE STATE COLLEGE OF WASHINGTON.—The meeting was called to order on February 7th by the president, Gilbert Whipps. Minutes of the meetings held on January 10th and 18th were read and approved.

Mr. Rack moved that the Branch contract for a half-page in the *Chinook*, and that an assessment of 15¢ be made on each member to help pay the cost. The motion was seconded and passed. Mr. Banich moved that a bill of \$1.50 for Mr. Whipps' transportation to Spokane to represent the A. Ph. A. at the regional convention, be allowed. Seconded and passed.

Dr. Dirstine introduced Mr. Dan Dawnen, local insurance agent, and the speaker of the evening, Mr. Macduff, representative of the United Pacific Insurance Company. Mr. Macduff discussed the various types of liability insurance that would protect the druggist. He spent considerable time on the owner-landlord and tenent policy. The O. L. T. policy gives protection against accidents which might occur on the sidewalk, in the store or caused by an employee. He mentioned burglary and robbery insurance and defined the two terms. His discussion on the doctor's combination policy proved interesting to the pharmacy-premed students.

After Mr. Macduff concluded his talk, a round-table discussion was held, during which many questions were answered.

The meeting was called to order February 14th by Dr. Dirstine, who introduced Mr. Brazier, a graduate of the University of California.

In Mr. Brazier's talk he stated that statistics show that a majority of the business in the United States is carried on in concentrated areas, i. e., cities of 50,-

000 population or more. He continued that there a move now taking place to increase business in the less populated areas. He mentioned in discussing the history of his company, Johnson & Johnson, that it was organized in 1886 and was a leader in producing aseptic dressing and surgical gut for the pharmacist and doctor. He described some of the manufacturing processes used to manufacture bandages and adhesive tape. He concluded by again raising the question of how trade in the less populated areas could be increased. In the round-table discussion several plans were evolved such as educational talks by the local pharmacist to service groups such as the parent teachers association, and the distribution of educational literature to youngsters in the grade schools to familiarize them with the care of the body. These pamphlets are to be distributed by the local druggist.

HAARON BANG, *Secretary*

TEMPLE UNIVERSITY STUDENT BRANCH.—The first meeting of the 1940 season was held in the Upper Amphitheatre of the College Building January 18th with President Alton Grube presiding. Members of the Faculty and the entire student body were present to hear addresses by Dr. E. F. Kell, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION and Lieutenant Glenn Smith of the United States Army School for the training of listed men in Pharmacy.

Dean Kendig introduced Dr. Kelly who spoke of Civil Service and the opportunities it offers pharmacists. He stated that high type men are desired because of the responsibility involved in these positions and further stated that Civil Service positions offer an excellent opportunity to demonstrate the capabilities of the pharmacists as they are trained to-day in our modern educational institutions. With many fields available for those who are trained in Pharmacy, Dr. Kelly stressed the importance of selecting the field that appealed most and in which the most useful service could be rendered.

Lieutenant Smith gave a very interesting history of the medical and pharmaceutical units in the United States Army, tracing these from their origin up to the present time. He told of some of the old favorite remedies, especially calomel, and in general gave a very excellent picture of the Army Medical Service. He explained that there are sixteen positions available for commissioned pharmacists in the army at present and expressed the hope that this number will be increased as pharmacists demonstrate their value in the Medical Corps.

Both speakers expressed their opinions relative to the importance of women in Pharmacy, and a vote of thanks was extended to both Dr. Kelly and Lieutenant Smith for their excellent addresses.

MARIE STEIGERWALT, *Secretary*

IN THE NEWS

On the new Board of Pharmacy for the state of Mississippi are: Marshall C. Smith, Hattiesburg; J. McDuffie, Nettleton; Clause L. Marron, Bayette; Lew Wallace, Laurel; and Chester Jones, Jackson.

The 61st convention of the Iowa Pharmaceutical Association was held in Des Moines, February 13th to 15th. Among the addresses on the program were: "Nothing Sells Merchandise Like Merchandise," J. J. Donlan; "Our Advertising Program," Milo Chehak and George McChange; "Potential Sales Possibilities," L. C. Zopf; "Should the Pharmacist Budget His Time," Edward S. Rose; "Cosmetics in the Drug Store," Richard M. Hofmann; "The Pure Food, Drug and Cosmetic Law," M. R. Stephens, Chief of St. Louis Division, U. S. Department of Agriculture. Mr. John O'Brien, chairman of the National Pharmacy Week Committee, made a plea for better observance of Pharmacy Week and extended congratulations to Mr. L. L. Eisenaut, of Des Moines, for winning second place in 1939. Dean R. A. Kuever and Prof. J. Earle Alloway presented very instructive papers. The address of Hon. Theodore Christianson was much enjoyed, as was also that of Mrs. Clara B. Miller; and "Merchandising in Russia," by Henry L. Adams as most interesting.

The Kansas Pharmaceutical Association met on March 12th to 15th, at Topeka, for the sixty-first year. Among the speakers were: Wilson Brown, American Dairies, Inc., "Fountain Profits;" Joseph Shine, Secretary, Illinois Pharmaceutical Association, "Potential Sales Possibilities;" E. P. Gannon, President, Midwestern Fixture Co., "So You Want to Make More Money;" Charles Luckman, Vice-President Pepsodent Co., "The Manufacturer's Point of View on Fair Trade;" Dr. R. L. Swain, Editor of *Drug Topics*, "Fair Trade and the Retailer" and "Federal Food, Drug and Cosmetic Act;" Hon. Theodore Christianson, Trade Relations Counsel, N. A. R. D., "The Independent Druggist in 1940;" H. S. Noel, Director Trade Relations, Eli Lilly & Co., "Where Have My Profits Gone?;" Gene Flaek, Goodwill Ambassador, Loose-Wiles Biscuit Co., "Power of Mind Over Mattress;" Presidential Address by W. F. Sprague.

The George Washington Law Review of the George Washington University has published a symposium presenting an appraisal of twenty-five years of the Federal Trade Commission and its work. It covers: Procedure and Practice, Administrative Law Aspects, Regulation of Unfair Trade Practices and Restraint of Trade Practices, Administration of Robinson-Patman Act, Trade

Practice Conference Rules, Activities of the Economic Division, Investigatory and Enforcement Activities, and Export Trade Act. The work is indispensable to attorneys, marketing officials and advisors, and economists.

Among those who visited the AMERICAN INSTITUTE OF PHARMACY during February were: Senator Ernest Lundeen, Waysata, Minn.; Charles Tuffash, S. Orange, N. J.; J. Willard Payne, Jr., Richmond, Va.; E. A. Wingold, Richmond, Va.; E. E. Barnett, Kecoughton, Va.; Alden Hankla, Radford, Va.; Kenneth Tipton, Petersburg, Va.; James N. Rhodes, Richmond, Va.; Moses Bridge, Richmond, Va.; Charles W. Johnson, Richmond, Va.; Paul G. Caplan, Richmond, Va.; Emilio P. Tusco, Richmond, Va.

The Pan American Sanitary Bureau, Washington, D. C., has donated to the AMERICAN PHARMACEUTICAL ASSOCIATION a copy of Scientific Societies and Institutions in Latin America, which has been placed in the Library. It is dated January 1940, contains fifty pages, and covers about forty titles: Pharmacy and Chemistry reports on Argentine, Brazil, Columbia, Cuba, Chile, Ecuador, Honduras, Mexico, Peru, Puerto Rico, Dominican Republic, Paraguay, Uruguay and Venezuela. Other subjects include: Biology, Cancer, Dentistry, Medicines, Nurses, Foods, Hygiene, Red Cross, Tuberculosis, Venereology, Veterinary Medicine, Surgery, Dermatology and Toxicology.

The 33rd Annual Meeting of the American Druggists' Fire Insurance Company was held in Cincinnati on February 12th to 14th. The meeting was highly interesting throughout and indications of increased business for 1940 gave real satisfaction to all in attendance.

During 1939 the company experienced 603 drug store fire losses, amounting to a total of \$225,774.06.

The following officers were elected: *President*, James H. Beal; *Vice-President*, G. O. Young; *Secretary*, Frank H. Freericks; *Assistant Secretary*, W. P. Starkey; *Treasurer*, Walter Rothwell; and *Assistant Treasurer*, Edward Voss, Jr.

Mr. and Mrs. Harry W. Blair of 212 S. Fairfax St., Alexandria, Va., loaned their historical home for the annual tour of old houses, which will be held on April 13th. Mrs. Blair is a writer of note. The home was formerly that of Dr. William Brown, physician and director of hospitals of the Continental Army, and author of the first American Pharmacopoeia. He was the personal friend and physician of George Washington. The house has rare charm and is of outstanding interest architecturally and historically. The grounds are composed of three gardens, each one private.

Prof. F. D. Lascoff delivered a series of four lectures on *pharmaceutical problems before the staff conferences on Pharmacology* at Columbia University, College of Physicians and Surgeons, Department of Dermatology. Considerable interest was reflected, some of the leading dermatologists of the country being present.

The fourth in the monthly series of "Refresher Courses" being presented by the School of Pharmacy of the University of Buffalo and its Alumni Association was held on Wednesday, February 14, 1940. Despite the inclemency of the weather, a large and enthusiastic audience greeted Dr. Arthur Osol, Professor of Chemistry and Associate Dean of Science at the Philadelphia College of Pharmacy and Science, who conducted the afternoon and evening discussions of difficult prescription problems. Dr. Osol paid particular attention to the methods for buffering solutions and adjusting hydrogen ion concentrations.

In a recent edition of the *Rocky Mountain Druggist*, reference is made to Ray Cook of Casper, Wyo., as a druggist who has a hobby in the artificial polination of flowers and the production thereby of new species or varieties some of which are exceptionally beautiful and some others so strange that they are classed as freaks. Mr. Cook is also an expert photographer.

Dr. Ivor Griffith, dean of the Philadelphia College of Pharmacy and Science, has been appointed to the Advisory Board of Health of Pennsylvania, the function of which is to control and promote the healthy activities of Pennsylvania. Appointed early in February by Gov. A. H. James, Dr. Griffith is the first pharmacist to be so honored. The appointment of Dean Griffith, marking the recognition of the profession of pharmacy in the health organization of the state of Pennsylvania follows precedent set through the past four decades by that state in taking its place among the leaders in scientific and public health progress.

Dr. Griffith is widely known as editor of the *American Journal of Pharmacy* and as author and lecturer. He is a graduate of the Philadelphia College of Pharmacy and Science, receiving the degree of Doctor in Pharmacy from that institution in 1912. He is a member of many scientific societies and was recently elected to succeed the late Dean Charles H. LaWall as an American Fellow of the Royal Society of Arts (London).

The fifty-second annual dinner of the Blizzard Class of the College of Pharmacy of Columbia University was held March 11th, and, in accordance with the custom inaugurated last year, the classes of 1889 and 1890 were invited to join. It is noteworthy that the Blizzard Class has met once a year ever since its graduation.

The members of the senior class, Columbia University, through invitation of E. R. Squibb & Sons, visited the Brooklyn plant February 6th and the New Brunswick laboratory February 7th. In this way they learned something of the magnitude and complexity of industrial pharmaceutical problems.

Dean C. W. Ballard, Columbia University, was invited to address the members of the general staff, the interne staff and the graduate student body of the Polyclinic Hospital, March 14th. His subject was, "Prescription Construction."

On Thursday, February 29th, a Course in Prescription Writing was given at Columbia University, College of Pharmacy. The subject was, "Practical Prescription Economics." Professors Charles C. Lieb and F. D. Lascoff spoke. Physicians and pharmacists were urged to attend.

OBITUARY

Thor Ekecrantz

In October 1939 there died at Stockholm, Sweden, Thor Ekecrantz, aged 83 years, the senior professor of the Swedish Royal Institute of Pharmacy, we learn from *Farm. Revy*. Dr. Ekecrantz studied at Stockholm University, at the Polytechnic in Zurich and at Uppsala University. In 1903 he was made extraordinary professor of chemistry and pharmaceutical chemist at the Royal Institute of Pharmacy in Stockholm and later became ordinary professor. In 1892 he started the Swedish Pharmaceutical Journal (*Tidskrift*) and was editor till 1906. He was author of about sixty scientific papers and several textbooks. He represented Sweden at many International congresses.—*Courtesy of Dr. C. S. Leonard*

Robert I. Beddoe

Robert I. Beddoe, of Bedford, Ind., member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1923, died January 24th, at his home. Mr. Beddoe was born in England and came to America in 1876, at two years of age. Upon completing his education he accepted employment in a drug store in Washington, Ind., and later became its manager. He went to Bedford in 1898, taking a position with Edward Mitchell; later he entered business with Stanley T. Chrisler and for a time they operated three stores.

Mr. Beddoe was an elder in the First Presbyterian Church, a charter member of the Rotary Club, served as a member of the State Board of Pharmacy from 1922 to 1926, was a past-president of the Indiana Pharmaceutical Society, a member of the Chamber of Commerce, a Mason, and at the time of his death a member of the City Council.

In 1904 Mr. Beddoe married Miss Emma Tresslar, and two children graced their home, Lucy and John, both of whom survive, together with Mrs. Beddoe

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“GIVE ME LIBERTY OR GIVE ME DEATH”



ST. JOHN'S CHURCH, RICHMOND, VA.

This historic church formed the meeting place for the Second Virginia Convention which met in Richmond in 1775 to discuss action against the royal governor, Lord Dunmore. This was the occasion on which Patrick Henry delivered his immortal "liberty or death" oration, flaming words destined to live and be heard by a greater audience, heralding the downfall of great dynasties and the advent of a new freedom.

Practical Pharmacy Edition

Journal of The American Pharmaceutical Association

E. F. Kelly, Editor, 2215 Constitution Ave., Washington, D. C.

A Great Privilege and a Public Trust

The Pharmacopœia and later the National Formulary have been keystones in the arch on which the professional program for pharmacy has been developed in this country. They play a prominent and indispensable part in the education and training of pharmacists, in the registration of pharmacists and in the regulation of the practice of pharmacy. They are interwoven in the pattern of pharmacy much more closely than many of their everyday users realize. And while their services may not always be apparent, they are depended upon to a remarkable extent by every pharmacist in practice every day.

The services of pharmacy in the development of the Pharmacopœia and the National Formulary have frequently been referred to as the greatest contributions which the profession has made to public health in this country. These publications were established and revised at regular intervals before legislation regulating the quality of drugs and medicines was enacted by either the Federal or any state government. This emphasizes the fact that pharmacy together with medicine had voluntarily adopted, improved and generally observed increasingly rigorous standards for these articles which are so necessary to the public health. It is evident that in the revision of these standards, the public welfare was clearly in the minds of the revisers as well as the requirements of the professions themselves, which was the original objective.

With the recognition of the Pharmacopœia and the National Formulary in the Federal and State Food and Drug Acts, their revision took on more definitely the character of a public trust. The recognition of these compendia, without any interference with the long-established machinery for their revision, constitutes a splendid tribute to the professions responsible for them and at the same time imposes on these professions a trust to protect the public interest as well as to serve the requirements of their own members. The recent strengthening and extension of food, drug and cosmetic legislation has to the same extent increased the responsibility of the revisers of the Pharmacopœia and the National Formulary to discharge their duties effectively and promptly.

Arrangements will be made during the A. Ph. A. meeting in Richmond, the week of May 5th to 11th, for the issuance of the N. F. VII; and during the Thirteenth Decennial Meeting of the U. S. P. Convention in Washington during the following week for

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the issuance of the U. S. P. XII. Since the practically completed manuscripts of both revisions will be submitted at these meetings, it is expected that the books will be issued during 1941.

The new Committee on National Formulary, consisting of ten members, each of whom is chairman of a sub-committee, was elected at the Atlanta meeting of the A. PH. A. last August and the new chairman of the committee, Dr. Justin L. Powers, took office on a full-time basis, March 1, 1940, for a term of ten years. Since the term of office of one member will expire each year, the Committee on National Formulary is now on practically a continuous basis. The committee has organized and has selected most of the auxiliary members of its sub-committees to the number of fifty.

During the U. S. P. Convention a number of decisions of unusual importance must be reached. Several amendments to the Constitution and By-Laws are to be considered, one of them providing that two revisions of the U. S. P. may be issued during the decade. A new Board of Trustees and a new Committee of Revision are to be elected and these two groups are to elect their officers and organize for work. The General Principles to be followed in the coming revision are to be adopted and other items of business transacted.

The actions taken at this convention will undoubtedly have an important bearing on the future of the Pharmacopœia and to that extent on the future of pharmacy. It is expected that pharmaceutical delegates will attend the convention with a clear understanding of the problems involved and with a keen realization of the responsibility resting on them as the representatives of their profession. It is expected that they will coöperate with the medical delegates and the delegates from other groups, in a solution of these problems which will be satisfactory to the professions interested and to the people whom they serve.

Under the new and more exacting conditions which will affect it during the next decade, the Pharmacopœia faces a real

challenge. The professions whose privilege and trust it is to revise the Pharmacopœia face the same challenge.

Pharmacy must do its part in meeting the challenge as it applies to the Pharmacopœia and also to the National Formulary.

E. F. K.

Richmond Meeting to Hear Notable Speakers

In addition to other features of the very interesting Program arranged for the 88th Annual Meeting of the A. PH. A., a group of outstanding speakers will address various groups.

Dr. Thomas W. Murrell, of the University of Virginia, at the Joint Dinner of the National Association Boards of Pharmacy and the American Association Colleges of Pharmacy on Monday evening.

Hon. James H. Price, Governor of Virginia, will bring a message of welcome to the First General Session on Tuesday evening.

Dr. Walter Clarke, Executive Director, American Social Hygiene Association, will also speak at the First General Session on "The Role of the Pharmacist in Combating Venereal Disease."

Hon. Harry F. Byrd, U. S. Senator from Virginia, and the guest speaker at the Joint Banquet on Wednesday evening, will have as his subject, "The Trend of Legislation at Washington."

Dr. William T. Sanger, President, Medical College of Virginia, will speak to the ladies on Thursday forenoon on "Virginia Homes and Gardens."

Dr. Harry N. Holmes, Oberlin College, Oberlin, Ohio, will speak at the Second General Session on "New Vitamin Discoveries."

NOTICE

Any one who wishes accommodations outside of the Headquarters Hotel (Hotel Jefferson), please write to Mr. R. R. ROOKE, Chairman, Housing Committee, 2929 Second Ave., Richmond, Va.

Invitation from the President

THE eighty-eighth annual Convention of the AMERICAN PHARMACEUTICAL ASSOCIATION and affiliated organizations, the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy will be held in Richmond, Virginia, from May 5th to 12th. The time is, therefore, rapidly approaching when the pharmacy clan will be wending its way to the "Queen City of the South" located in the "Old Dominion."

On this occasion, there will be assembled from all parts of the country pharmaceutical practitioners, manufacturers and wholesalers, pharmaceutical educators, persons engaged in the pursuit of pharmaceutical research, members of the state boards of pharmacy, food and drug law enforcement officials, pharmaceutical journalists and others. All will be there for the purpose of obtaining first-hand information on the progress which has been made in pharmacy and allied fields during the past year, and of taking part in the development of the program of activities for the ensuing year, both of which are worthy objectives because they lead to better pharmaceutical service and, therefore, to greater benefits to the public.

The AMERICAN PHARMACEUTICAL ASSOCIATION has not met in Richmond, Virginia, since 1910 and the pharmaceutical fraternity of that city and state are looking forward with keen pleasure to this occasion and to the opportunity of demonstrating to you the real meaning of southern hospitality. An excellent program has been arranged for increasing your knowledge of the professional and business affairs of pharmacy and for your entertainment. This is the one great opportunity for you to meet new members of your profession and to renew old acquaintanceships. May is the month when Nature puts on her brightest smile and the "Old Dominion" is endowed with rare natural beauties. It, therefore, gives me real pleasure to extend on behalf of the officers of the AMERICAN PHARMACEUTICAL ASSOCIATION and the members of the Local Committee a cordial invitation to the members of the ASSOCIATION, their families and friends to attend this meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION and the meetings of the affiliated organizations.

A. G. DUMÉZ, *President*,

AMERICAN PHARMACEUTICAL ASSOCIATION

Message from the Chairman of the House of Delegates

The House of Delegates of the A. Ph. A. is the real clearing house for American Pharmacy. Here the professional problems of every division of pharmacy can be presented and considered by the representatives of every other division. Here views and opinions can be freely exchanged and sound conclusions reached.

The tempo of the times demands prompt decisions and decisive actions if pharmacy is to fully meet its responsibilities and its opportunities as a public health profession. Many basic questions will come before the House of Delegates in Richmond—food, drug and cosmetic legislation; socialized medicine and medical care; pharmacy laws

and their enforcement; inter-professional relations—and many more.

This is a cordial invitation and also a strong appeal to every organization entitled to representation in the House of Delegates to send a representative delegation to Richmond, prepared to present their problems and to help in solving them as well as the problems of other groups.

It will be a pleasure to me as chairman, and to the other officers of the House, to welcome each delegate to the Richmond sessions and to work with them in making this meeting of the greatest possible value to our profession and to our fellow pharmacists.

M. N. FORD, *Chairman*, House of Delegates.

Message from the Local Secretary

RICHMOND—capital of the Cavaliers—a city that is mellow and yet modern, where the rustle of the past may still be heard amid the bustle of the present—invites the members of the AMERICAN PHARMACEUTICAL ASSOCIATION to the eighty-eighth annual meeting of the ASSOCIATION.

There is a wealth of tradition in and about Richmond; to appreciate the city, one must appreciate this fact. There is tradition, also, about pharmacy that is important to its past, present and future. Richmond was founded in 1737 by William Byrd II of Westover. Senator Harry Flood Byrd, an illustrious descendant of the city's founder, will be the speaker at the big joint banquet, May 8th. Thus the present will be blended with the past in a personality as it has been done at times historically and traditionally.

During this convention, every effort will be made to permit those in attendance to become acquainted with Virginia life and

the mode of living of its people. Cities and states, after all, are but larger patterns of individual people. People who have been tested by time and tribulation and yet come out smiling, full of faith and courage, never fail to command admiration. The people of Richmond have made the city and have in turn been made by it. No one can long live in the mellowness of Richmond without feeling that here is a calm that is not dead but gay, an ease and a friendliness that is real and not assumed, a determination to build always for the future but never to forget the heritage of the past which is our inspiration, a will to be of such quality that we cannot fail to give strength to the nation, going always forward up the middle of the road that leads to right and justice.

The gates of this city are open to the members of the AMERICAN PHARMACEUTICAL ASSOCIATION.

L. C. BIRD, *Local Secretary*

APPLICATION FOR MEMBERSHIP IN THE

American Pharmaceutical Association

Approving the objects of the American Pharmaceutical Association, I hereby apply for membership in the Association and subscribe for the "Journal of the American Pharmaceutical Association," and enclose \$5.00 as annual membership dues, \$4.00 of which is for a year's subscription to the Journal.

Name in Full
(Write or print name in full—Initials are not sufficient)

Number and Street

Date Town..... State

Paid \$.. No.....

This application with the first year's payment of \$5.00 may be sent to the Chairman of the Membership Committee, the Secretary or any officer of the A. Ph. A.

E. F. KELLEY, Secretary,
2215 Constitution Ave.,
Washington, D. C.

P. P. E.

PROGRAM OF THE 88TH ANNUAL MEETING AMERICAN PHARMACEUTICAL ASSOCIATION AND AFFILIATED ORGANIZATIONS, HOTEL JEFFERSON, RICHMOND, VA. MAY 4TH TO 11TH, 1940

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General Information

The Arrangements Committee for the 1940 A. Ph. A. Convention sincerely hopes that you will have a most profitable and enjoyable time during your stay with us. Please feel free to call on any member of the Committee if they can be of service to you in any way.

L. C. BIRD, *Local Secretary*

Register Promptly.—The Registration Desk is located in the Lobby. Be sure to receive the official badge and tickets covering the entertainment features—examine and carry them with you—exchange the coupons promptly as requested.

The Information Desk.—Inquire here for Garage and Automobile Service; Lost and Found Bureau; Physician, Dentist, Pharmacist, Nurse or Hospital, etc.

Bulletin Board.—Telephone Calls, Telegrams and Announcements will be posted near Registration Desk.

Membership.—Join the AMERICAN PHARMACEUTICAL ASSOCIATION—Application Blanks at the Information Desk.

Time.—All meetings and events are to be held on Eastern Standard time. Set your watch by the Hotel Clock.

THE GENERAL PROGRAM

May 4th to 11th, 1940

Saturday, May 4th

- 9:30 A.M. American Council on Pharmaceutical Education, Library.
2:00 P.M. American Council on Pharmaceutical Education, Library.

Sunday, May 5th

- 9:30 A.M. Council, A. Ph. A., Randolph Room.
2:00 P.M. Council, A. Ph. A., Randolph Room.
8:00 P.M. Meeting of Executive Committee, A. A. C. P. Library
8:00 P.M. Opening Entertainment, Jefferson Hotel.

Monday, May 6th

- 9:00 A.M. American Association Colleges of Pharmacy, Executive Committee, Library.
9:30 A.M. Conference of Teachers of Chemistry, Salon.
Conference of Teachers of Pharmacy, Jefferson Room.
Conference of Teachers of Pharmacognosy and Pharmacology, East Parlor.
Conference of Teachers of Pharmaceutical Economics, West Parlor.
9:00 A.M. National Association Boards of Pharmacy, Flemish Room.
9:30 A.M. Conf. of Professional Pharmacists. Green Room.
12:30 P.M. Luncheon, N. A. B. P., Auditorium.
1:30 P.M. N. A. B. P., Flemish Room.
1:30 P.M. A. A. C. P., First Session, Jefferson Room.
2:30 P.M. Committee on Pharmaceutical Syllabus, Library.
6:00 P.M. Joint Dinner—N. A. B. P. and A. A. C. P., Auditorium.
8:00 P.M. A. A. C. P., Second Session, Jefferson Room and Salon.
8:00 P.M. Conf. Pharm. Law Enforcement Officials, First Session, Flemish Room.
8:00 P.M. Committee on Pharmaceutical Syllabus, Library.

Tuesday, May 7th

- 9:30 A.M. Joint Conference, A. Ph. A., N. A. B. P. and A. A. C. P., Auditorium.
12:15 P.M. Luncheon, Committee on Recipe Book, Dining Room A.
2:00 P.M. N. A. B. P., Flemish Room.
2:00 P.M. A. A. C. P., Third Session, Jefferson Room.
2:00 P.M. National Conf. on Pharmaceutical Research, Salon.
4:00 P.M. Conf. Pharm. Law Enf. Officials, Second Session Flemish Room.
6:30 P.M. Dinner, Rho Chi Society, followed by Annual Meeting.
6:30 P.M. Dinner, National Conf. on Pharm. Research.
8:30 P.M. First General Session, A. Ph. A., Auditorium.

Wednesday, May 8th

- 8:00 A.M. Breakfast, Members U. S. P. Committee of Revision and Board of Trustees.
- 9:30 A.M. First Session, House of Delegates, Auditorium.
- 10:30 A.M. Meeting of the Women's Auxiliary, Salon.
- 12:45 P.M. Luncheon, Kappa Psi Fraternity and Lambda Kappa Sigma Sorority.
- 12:45 P.M. Luncheon, Phi Delta Chi Fraternity Council, A. Ph. A., Randolph Room.
- 2:30 P.M. First Session, Scientific Section, Green Room.
- 2:30 P.M. First Session, Section on Education and Legislation, Salon.
- 2:30 P.M. First Session, Section on Practical Pharmacy and Dispensing, Jefferson Room.
- 2:30 P.M. First Session, Section on Historical Pharmacy, East Parlor.
- 2:30 P.M. First Session, Section on Pharmaceutical Economics, Flemish Room.
- 2:30 P.M. First Session, Conf. Pharm. Assn. Secretaries, West Parlor.
- 3:30 P.M. First Session, Sub-Section on Pharmacy, Monticello Room.
- 3:30 P.M. Meeting, Committee on Nominations.
- 3:30 P.M. Meeting, Committee on Resolutions, Monroe Room.
- 7:30 P.M. Joint Banquet, A. Ph. A. and Related Organizations, Auditorium.

Thursday, May 9th

- 9:30 A.M. Second General Session, A. Ph. A., Auditorium.
- 12:30 P.M. Veteran Druggists Luncheon, Flemish Room.
- 1:30 P.M. Conf. of State Committees on U. S. P.-N. F. Promotion, East Parlor.
- 2:30 P.M. First Session, Sub-Section on Hospital Pharmacy, Monticello Room.
- 2:30 P.M. Conference of Professional Pharmacists, Jefferson Room.
- 8:00 P.M. Second Session, House of Delegates, Auditorium.

Friday, May 10th

- 9:30 A.M. Joint Session, Scientific Section and Section on Practical Pharmacy and Dispensing, Auditorium.
- 9:30 A.M. Second Session, Section on Education and Legislation, Salon.
- 10:30 A.M. Second Session, Sub-Section on Hospital Pharmacy, Monticello Room.
- 10:30 A.M. Second Session, Scientific Section, Auditorium.
- 2:30 P.M. Third Session, Scientific Section, Auditorium.
- 2:30 P.M. Second Session, Section on Practical Pharmacy and Dispensing, Jefferson Room.
- 2:30 P.M. Second Session, Section on Historical Pharmacy, East Parlor.
- 2:30 P.M. Second Session, Section on Pharmaceutical Economics, Flemish Room.
- 2:30 P.M. Second Session, Conf. Pharm. Assn. Secretaries, West Parlor.
- 6:30 P.M. Dinner, Former Presidents, A. Ph. A.
- 7:30 P.M. Meeting, Committee on Resolutions, Monroe Room.
- 8:00 P.M. Final Session, House of Delegates, Jefferson Room.
- 10:00 P.M. Final Entertainment, Auditorium.

Saturday, May 11th

- 9:30 A.M. Final General Session, A. Ph. A. Auditorium.
- 1:00 P.M. Council, A. Ph. A., Randolph Room.
- 2:00 P.M. Plant Science Seminar, Trip to Mount Park.
- 8:00 P.M. Plant Science Seminar, Business Session, Baruch Auditorium.

THE GENERAL SESSIONS

ASSOCIATION OFFICERS

President, A. G. DuMez; Honorary President, J. W. Gayle; First Vice-President, F. O. Taylor; Second Vice-President, F. J. Cermak; Secretary, E. F. Kelly; Treasurer, C. W. Holton.

OFFICERS-ELECT, 1940-1941

President, Charles H. Evans; First Vice-President, H. A. K. Whitney; Second Vice-President, Henry H. Gregg, Jr.; Members of the Council (for three years), F. J. Cermak, H. A. B. Dunning and C. B. Jordan.

First General Session, Tuesday, May 7th, 8:30 P.M., Auditorium

1. Call to Order.
2. Reading of Communications.
3. Message of Welcome, Hon. James H. Price, Governor of Virginia.
4. Report of the House of Delegates, M. N. Ford, Chairman.
5. Address of the President, A. G. DuMez.
6. Introduction of the President-Elect, C. H. Evans.
7. Address by Dr. Walter Clarke, "The Role of the Pharmacist in Combating Venereal Disease," Executive Director, American Social Hygiene Association.
8. Unfinished Business.
9. New Business.

Second General Session, Thursday, May 9th, 9:30 A.M., Auditorium

A Brief Memorial Session will be held.

1. Minutes of the First General Session.
2. Reading of Communications.
3. Report of the House of Delegates on the President's Address and on Other Matters, M. N. Ford, Chairman.
4. Report of the Committee on Maintenance, H. A. B. Dunning, Chairman.
5. The United States Pharmacopœia, E. Fullerton Cook, Chairman, Committee of Revision.
6. The National Formulary, J. L. Powers, Chairman, Committee on N. F.
7. Address by Dr. Harry N. Holmes, Oberlin College, Oberlin, Ohio, "New Vitamin Discoveries."
8. New Business.

Third General Session, Saturday, May 11th, 9:30 A.M., Auditorium

1. Minutes of the Second Session.
2. Reading of Communications.
3. Final Report of the House of Delegates, M. N. Ford.
4. Unfinished Business.
5. Award of the Ebert Prize.
6. Award of the Kilmer Prize.
7. Installation of Officers.
8. Address of the President, C. H. Evans
9. Final Adjournment.

THE COUNCIL

Third Session, Friday, May 10th, 8:00 P.M.,
Jefferson Room

1. Roll Call of Delegates.
2. Minutes of the Second Session.
3. Receipt of Reports and Other Communications from the ASSOCIATION, the Council and the Sections.
4. Reports of Committees on Membership, E. F. Kelly; on U. S. Pharmacopœia, E. H. Wirth; on Horticultural Nomenclature, H. W. Youngken; on Physiological Testing, C. W. Chapman; on Wm. Procter, Jr., Memorial Fund, J. E. Hancock; on Endowment Fund, H. A. B. Dunning; on Press Relations, R. W. Rodman.
5. Final Report of the Committee on Resolutions.
6. Unfinished Business.
7. Installation of Chairman and Vice-Chairman.
8. Final Adjournment.

Chairman, S. L. Hilton; *Vice-Chairman*, Glenn L. Jenkins; *Secretary*, E. F. Kelly; H. A. B. Dunning, P. H. Costello, Roy B. Cook, R. L. Swain, H. C. Christensen, R. P. Fischelis, Ernest Little, A. G. DuMez, J. Leon Lascoff, F. O. Taylor, F. J. Cermak, C. W. Holton, M. N. Ford.

Sessions—Randolph Room

Sunday, May 5th, 9:30 A.M. and 2:00 P.M.; Wednesday, May 8th, 2:30 P.M.; Saturday, May 11th, 1:00 P.M.

THE HOUSE OF DELEGATES

Chairman, M. N. Ford; *Vice-Chairman*, E. C. Severin; *Secretary*, E. F. Kelly.

First Session, Wednesday, May 8th, 9:30 A.M.,
Auditorium

1. Call to Order.
2. Roll Call of Delegates.
3. Reception of Fraternal Delegates.
4. Opening Remarks by Chairman M. N. Ford.
5. Appointment of Committee on Nominations and on Resolutions.
6. Annual Report of the Council.
7. Annual Report of the Treasurer, C. W. Holton.
8. Annual Report of the Secretary, E. F. Kelly.
9. Executive Session. Discussion of Food, Drug and Cosmetic Legislation and Other Topics. Report of the Committee on State Food and Drug Legislation, R. P. Fischelis.
10. "The Need of Continuation Study for Pharmacists," S. H. Dretzka.
11. Receipt of Resolutions, Reports and Other Communications—all of which must be in writing.
12. New Business.

Second Session, Thursday, May 9th, 8:30 P.M.,
Auditorium

1. Roll Call of Delegates.
2. Minutes of the First Session.
3. Receipt of Reports and Other Communications from the ASSOCIATION, the Council and the Sections.
4. Receipt of Reports, Resolutions and Other Communications—all of which must be in writing.
5. Executive Session for the Consideration of Matters of Vital Importance to Pharmacy in America.
6. Reports of Committees on Social and Economic Relations, R. P. Fischelis; on Long Range Program of Policy, W. F. Rudd; on the Modernization of Pharmacy Laws, R. L. Swain; on Local and Student Branches, Ernest Little; on Pharmacy Week, John E. O'Brien; on Legislation, E. F. Kelly; on Pharmacists in the Government Service, H. Evert Kendig; on Prescription Tolerances, T. W. Hoskins; on Professional Relations, C. B. Jordan; on Dental Pharmacy, G. C. Schicks.
7. Election of the Honorary President, Secretary and Treasurer of the ASSOCIATION on Nomination by the Council.
8. Report of the Committee on Nominations.
9. Report of the Committee on Place of Meeting, W. F. Rudd.
10. Report of the Committee on Resolutions.
11. New Business.

THE SECTIONS

Please Note—Order of Business and Order of Programs are subject to change and additional numbers by Sections, if found expedient to do so.

Papers of the Sections are numbered at the request of the Local Committee to assist in an effort to flash titles of papers being read in different Sections at the same time. The flash designations are as follows: Scientific Section, "Sc.," Education and Legislation, "E.," Practical Pharmacy, "Ph.," Hospital Pharmacy, "Hosp.," Pharmaceutical Economics, "PEc.," Historical Pharmacy, "Hi."

SCIENTIFIC SECTION

(Flash "Sc.")

Chairman, J. B. Burt; *First Vice-Chairman*, J. M. Dille; *Second Vice-Chairman*, J. W. Grote; *Secretary*, F. E. Bibbins; *Delegate to the House of Delegates*, C. F. Lanwermyer.

First Session, Wednesday, May 8th, 2:30 P.M.,
Green Room

Chairman's Address—J. B. Burt
Secretary's Report—F. E. Bibbins.
Committee Reports:

Board of Review of Papers, F. E. Bibbins, Chairman.
Committee on Monographs, E. E. Swanson, Chairman.
Special Committees.
Appointment of Nominating Committee.
General Business.

PAPERS

1. "Acidity and Alkalinity as Factors in the Stability of Ether," by E. S. Herlong and A. W. Berry.
2. "Papain as a Precipitant of Gums," by George E. Ewe.
3. "Detection of Unsaturates in Cyclopropane," by Frederick K. Bell and John C. Krantz, Jr.
4. "A Study of Intermolecular Compounds" by Helmut M. Haendler with L. Wait Rising.
5. "Assay of a Variety of Vitamin B₁ Preparations by the Fluorophotometric Method," by J. W. Cole, W. S. Jones and W. G. Christiansen.
6. "The Synthesis of Hydroxy Mandelo-Nitrile Dibenzoates as Possible Intermediates in the Synthesis of Tyramine and Its Isomers," by K. E. Hamlin, Jr., and W. H. Hartung.

7. "Tannic Acid, U. S. P. II. The Relationship between Glucose and Tannic Acid," by Clifton E. Miller and L. Wait Rising.
8. "Tannic Acid, U. S. P. III. Hydrogen-ion Studies of Tannic Acid Solutions," by Clifton E. Miller and L. Wait Rising.
9. "A Study of the Reaction Products of Acetylsalicylic Acid with Codeine and Morphine," by Charles C. K. Chang, L. W. Busse and A. H. Uhl.
10. "Variations in the Glutamic Acid Content of Steffen's Waste from Colorado and Other Beet Sugar Producing Areas," by Edward Bartow and David William O'Day. (Lantern.)
11. "The Fatty Acids of Carnauba Wax," by R. A. Bowers and A. H. Uhl. (Lantern.)
12. "The Analysis of Sodium Acetate," by R. M. Hitchens, G. W. Ashworth and W. H. Demaree. (Lantern.)
13. "Polypoidy in Relation to Chemical Analysis," by Wm. J. Bonisteel. (Lantern.)
14. "Potassium Bismuth Saccharate. II. The Toxicity, Absorption and Distribution of Bismuth Following Intramuscular Injection," by C. W. Sondern, A. E. Pugh, F. V. Kalich, George Lann and C. J. W. Wiegand. (Lantern.)
15. "A Study of the Assay of Blaud's Pills and the Effects of Various Sugars upon Their Stability," by M. L. Neuroth and C. O. Lee.
16. "The Volumetric Determination of Magnesium in Solution of Magnesium Citrate," by Solomon M. Berman. (Presented by title.)
17. "A Method for the Determination of Mercury in Complex Ions," by John T. Read and Roger F. Maize. (Presented by title.)

SUB-SECTION ON PHARMACOGNOSY

Wednesday, May 8th, 3:30 P.M.,

Monticello Room

PAPERS

18. "Viburnum Studies, IX. The Pharmacognosy and Pharmacology of Viburnum Alnifolium," by Heber W. Youngken and James C. Munch. (Lantern.)
19. "The Alkaloids of the Chinese Drug Pai Pu," by Henry M. Lee and K. K. Chen. (Lantern.)
20. "The Effect of Some Adsorbents, Precipitants and Oxidants upon the Resin of Rhus Toxicodendron," by Ole Gisvold.
21. "A Comparative Study of the Total Volatile Acids of Viburnum Stem and Root Barks," by Irvine W. Grote.
22. "Studies on the Anatomy of Rhamnus Alnifolia and Rhamnus Lanceolata," by Norman R. Lacombe and Heber W. Youngken.
23. "The Constitution of Celastrol Part III," by Ole Gisvold.
24. "Cultivation of Fennel in Washington," by T. E. Becker, E. J. Isler and F. J. Goodrich.
25. "The Status of the Clone in Pharmacognosy," by Wm. J. Bonisteel. (Lantern.)
26. "A Brief History of Commercial Medicinal Plant Culture in the United States," by A. E. Sievers.
- 26a. "Preliminary Studies with Nepeta Glechoma," J. Howard Graham and Louise M. Bitto.

JOINT SESSION SCIENTIFIC SECTION AND SECTION ON PRACTICAL PHARMACY AND DISPENSING

Friday, May 10th, 9:30 A.M., Auditorium

- Progress in the Revision of United States Pharmacopœia, E. Fullerton Cook, Chairman. (15 minutes.)
- Progress in the Development of National Formulary J. L. Powers, Chairman. (15 minutes.)
- Progress in the Revision of Recipe Book, J. Leon Lascoff, Chairman. (15 minutes.)
- Report of the Committee on Prescription Tolerances, T. W. Hoskins, Chairman. (10 minutes.)

Second Session, Scientific Section

Friday, May 10th, 10:30 A.M., Auditorium

PAPERS

27. "Pharmaceutical Emulsions. I. A Study of the Continental Method," by William J. Husa and Charles H. Becker. (Lantern.)
28. "Pharmaceutical Emulsions. II. A Study of the English Method," by William J. Husa and Charles H. Becker. (Lantern.)
29. "Pharmaceutical Emulsions. III. A Comparative Study of Various Mechanical Stirrers and the Hand Homogenizer," by William J. Husa and Charles H. Becker. (Lantern.)
30. "Pharmaceutical Emulsions. IV. Mixtures of Acacia and Tragacanth as Emulsifying Agents," by William J. Husa and Charles H. Becker. (Lantern.)
31. "Phenolic Ointments," by Carl B. Burnside and Rudolph A. Kuever.
32. "Considerations for Evaluation of Germicides," by P. Goedrich.
33. "Drug Extraction. XXIII. The Extraction of Ipomea," by William J. Husa and Thomas J. Macek.
34. "A Comparative Study of Skin Antiseptics with Special Reference to Penetrability and the Introduction of a New Method of Studying Skin Antiseptics," by Leonard J. Piccoli.
35. "Adaptation of Assay Methods for Some N. F. Ointments. Ointment of Zinc Stearate," by W. B. Baker and D. I. Kutzly.
36. "Assay of Mercuric Chloride," by Berl S. Alstodt.
37. "The Stabilizing Effects of Antioxidants upon Solution of Tannic Acid, N. F.," by K. P. DuBois and C. O. Lee.
38. "A Study of the Manufacture of Compressed Tablets. II. Pectin as a Binding Agent," by L. W. Busse and A. H. Uhl.
39. "The Homogeneity of Tablet Mixtures before Granulating," by E. C. Beeler, R. K. Snyder and E. N. Gathercoal.

Third Session, Scientific Section

Friday, May 10th, 2:30 P.M., Auditorium

- Report of Committee on Ebert Prize. M. J. Andrews, Chairman.
- Report of Committee on Kilmer Prize. H. W. Youngken, Chairman.
- Report of Nominating Committee.

PAPERS

40. "A Study of the Synergism between Morphine and Aliphatic Narcotics," by Lloyd W. Hazleton and Theodore Koppanyi. (Lantern.)

41. "The Effects of Life Cycle Daily Therapeutic Dose Administration of Commonly Used Drugs to Albino Rats. I. Caffeine," by Lloyd L. Boughton. (Lantern.)
42. "Acetanilid Studies. I. Acute Toxicity," by James C. Munch, Harry J. Pratt and Lilian N. Phillips.
43. "Pressor Drugs. I. Chemistry and Pharmacology of an Analogue of Epinephrine," by James C. Munch, Vincent H. Gattone and Harry J. Pratt. (Lantern.)
44. "Relationship between Hemolytic Action and Chemical Structure of Certain Barbituric Acid Derivatives," by Henry M. Lee and Edward E. Swanson. (Lantern.)
45. "Deterioration of Digitalis," by James C. Munch.
46. "Biochemical and Pharmacological Differentiation of Cobra Venom from Other Snake Venoms," by David I. Macht, Wilton G. Harden and John H. Brewer. (Lantern.)
47. "A Study of the Irritant Effects of Cathartics—Aloin," by Melvin W. Green. (Lantern.)
48. "A Preliminary Study of the Subcutaneous Implantation of Various Bases Containing a Powdered Extract of the Anterior Pituitary," by L. W. Busse and A. H. Uhl. (Lantern.)
49. "Further Notes on the Bioassay of Red Squill Powder," by Justus C. Ward and D. Glen Crabtree.
50. "The Influence of Altitude upon the Toxicity of Red Squill Powder to Albino Rats," by Justus C. Ward, H. J. Spencer, D. Glen Crabtree and F. E. Garlough.
51. "A Study of the Rat-Killing Properties of Extracts of Red Squill," by M. V. Miller and C. O. Lcc.
52. "The Growth Effects of Thiamin Chloride, Ascorbic Acid and Phyto Hormones on Belladonna and Ricinus," by Louis C. Zopf.
53. "A Preliminary Report: The Effect of Fresh *Alae Vera* Jell in the Treatment of Third Degree X-Ray Reactions on White Rats," by Tom D. Rowe.
54. "Influence of Sex Life upon Resistance to Nostal and Pentobarbital," by Harald G. O. Holck and Lewis D. Fink. (Lantern.)
55. "Synthesis of Several Dialkylmalonylguanidines with a Preliminary Note on Their Pharmacology," by Orville H. Miller and Louis Fischer. (Presented by title.)
56. "Philippine Avocado (*Persea American Mill*) Pear Oil," Clara Manotok and Patrocinio Valenzuela.
57. "A Chemical Study of Mercurated Carvacrol," Juanito B. Abcede and Alfredo C. Santos.
58. "Note on Philippine Turtle Oil," Patrocinio Valenzuela and Pura Villarica.
59. "Comparison of Long Acting and Short Acting Barbiturates," Norman A. David.
60. "Experimental Studies in Heparin-Sulfapyridine Combination," Norman A. David.
61. "Comparison of the One- and Eighteen-Hour Frog Method for the Assay of Digitalis," C. W. Chapman.
62. "Discussion of Results Obtained in a Collaborative Study of the Assay of Digitalis," L. C. Miller.

Report of Committee on Chairman's Address.
Unfinished Business.
New Business.
Election and Installation of Officers.
Adjournment.

SECTION ON PRACTICAL PHARMACY AND DISPENSING

(Flash "Ph.")

Chairman, R. W. Clark; First-Vice-Chairman, W. A. Prout; Second Vice-Chairman, Earl P. Guth; Secretary, Louis C. Zopf; Delegate to the House of Delegates, L. W. Richards.

First Session, Wednesday, May 8th, 2:30 P.M.,
Jefferson Room

Chairman's Address—R. W. Clark.
Secretary's Report—Louis C. Zopf.
Committee Reports.
Appointment of Committees.

PAPERS

1. "Pharmacy and the Public," Chas. V. Selby.
2. "The Pharmacist as a Consultant," Max M. Lemberger.
3. "Advertising for More Prescriptions," J. W. Snowden.
4. "Can the Druggist Afford to Make His Own Pharmaceuticals?" Clark T. Eidsmoe.
5. "A Prescription Survey. I. Types of Official Preparations Prescribed as One-Item Prescriptions," Marvin J. Andrews.
6. "A Prescription Survey. II. Types of Official Drugs and Preparations Prescribed as Two or More Item Prescriptions," Marvin J. Andrews.
7. "A Prescription Survey. III. Narcotic Prescriptions," Marvin J. Andrews.
8. "A Prescription Survey. IV. Prescriptions Containing Brand or Trade Name Items," Marvin J. Andrews.
9. "A Prescription Survey. V. The Ingredients Prescribed," Marvin J. Andrews.
10. "A Study of the Manufacture of Compressed Tablets. I. General Problems," L. W. Busse and A. H. Uhl.

JOINT SESSION WITH SCIENTIFIC SECTION

Friday, May 10th, 9:30 A.M., Auditorium

(See program of Scientific Section.)

Second Session, Friday, May 10th, 2:30 P.M.,
Jefferson Room

PAPERS

11. "A Permanently Stable Elixir of Ferrous Sulfate," Donald A. Clarke.
12. "A Determination of the Fungistatic Value of Oil of Cinnamon and Certain Chemicals in Various Ointment Bases Using *Monilia Albicans* and *Trichophyton Interdigitale* as Test Organisms," Francis Joseph O'Brien.
13. "A Note on the Preparation of Sulfanilamide Ointment," Walter M. Ormes, Jr.
14. "Correlation of the Evaluation of Disinfectants by the Agar Cup-Plate Method and Clinical Experience," Rhett G. Harris and William A. Prout.
15. "A Study of Silica Gel as a Carrier for Antiseptics," Mac S. Eddleman, Rhett G. Harris and William A. Prout.
16. "A Survey of the Status of Latin in Prescription Writing," Joseph P. Miale.
17. "Liquid Petrolatum Solutions of Ephedrine, Chlorbutanol and Similar Compounds," Charles O. Wilson.

18. "Collection and Correlation of Certain Statistical Data with Respect to Medicinal Chemicals. I," L. Wait Rising and E. M. Plein.
19. "Collection and Correlation of Certain Statistical Data with Respect to Medicinal Chemicals. II," L. Wait Rising and E. M. Plein.
20. "Record Keeping in the Dispensing Laboratory. II," E. M. Plein and L. Wait Rising.
21. "Liquor Aromaticus Alkalinus N. F.," Edward C. Watts.
22. "New Emulsifiers for Pharmacy," Carl Malamisuro and J. Howard Graham.
23. "A Prescription Ingredient Survey of Tippecanoe County, Indiana for 1939," R. E. Heine and C. O. Lee.
24. "Progress in Prescriptions," Lewis G. Freeman.
25. "Further Uses of Bentonite," Lewis G. Freeman.
26. "Isotonic Intranasal Medications," Sister Gladys Robinson and Karl J. Goldner.

New Business.

Reports of Committees.

Election and Installation of Officers.

Adjournment.

SUB-SECTION ON HOSPITAL PHARMACY

(Flash "Hosp.")

Chairman, H. A. K. Whitney; First Vice-Chairman, Eldon Roberts; Secretary, Hazel E. Landeen.

First Session, Thursday, May 9th, 2:30 P.M.,
Monticello Room

Appointment of Committees.

Secretary's Report.

1. Chairman's Address.

PAPERS

2. "Recent Progress in Hospital Pharmacy," Edward Spease.
3. "The Hospital Pharmacist and Drug Therapy," J. Solon Mordell.
4. "Collyria: Some Additional Notes," Madeline O. Holland.
5. "Buying Methods and Stock Control for the Pharmacy," R. M. Porter.
6. "The Trends and Future of Hospital Pharmacy," Lewis E. Jarrett.

Second Session, Friday, May 10th, 10:30 A.M.,
Monticello Room

7. "Control of Ward Drug Cabinets and Permanent Labels," Maybelle Fernald.
8. "Vitamins 'A' and 'D' Bearing Fish Liver Oils, Commercial Sources of," Donald A. Clarke.
9. "Naval Pharmacy," A. Schwartz.
10. "Experiences in Pricing Hospital Medication," I. T. Reamer.
11. "Bacteriological Stains and Diagnostic Reagents in Hospital Pharmacy," Mitchell Stoklosa.
12. "Other Duties of a Hospital Pharmacist," Jennie M. Banning.

Unfinished Business.

Report of Committees.

Election and Installation of Officers.

Adjournment.

SECTION ON EDUCATION AND LEGISLATION

(Flash "E.")

Chairman, A. O. Mickelsen; Vice-Chairman, L. M. Ohmart; Secretary, R. T. Lakey; Delegate to the House of Delegates, J. F. McCloskey.

First Session, Wednesday, May 8th, 2:30 P.M.,
Salon

Chairman's Address—A. O. Mickelsen.

Secretary's Report—R. T. Lakey.

Appointment of Committees.

SYMPOSIUM ON NATIONAL AND STATE LEGISLATION

PAPERS

1. "The Pharmacy Act of New York," George W. Mather. Discussion, Hugo H. Schaefer.
2. "Advertising of Drugs in Maryland by Non-Pharmacists," Aquilla Jackson. Discussion, L. M. Kantner.
3. "Should a National Board of Examiners in Pharmacy Be Established?" Myron N. Ford. Discussion, A. B. Lemon.
4. "Coöperative Control of Dangerous Drugs," C. Leonard O'Connell. Discussion, S. H. Drctzka.
5. "Registration in Colleges of Pharmacy," Ernest Little. Discussion, C. B. Jordan.

Second Session, Friday, May 10th, 9:30 A.M., Salon

6. "Uniform Regulations Under Food and Drug Acts," R. P. Fischelis. Discussion, A. L. I. Winne.
7. "Definitions in Pharmaceutical Syllabus," H. M. Burlage. Discussion, George A. Moulton.
8. "Training of Technicians in Medical Department of U. S. Army," Glenn K. Smith. Discussion, John F. McCloskey.
9. "The Status of Pharmacy Under U. S. Civil Service," A. S. Ernest. Discussion, H. Evert Kendig.
10. "Opposing Theories of Education in Pharmacy," Henry Colle.
11. "College Physics in the Pharmacy Curriculum," Cosmo Ligorio.

Unfinished Business.

Report of Committees.

Election and Installation of Officers.

Adjournment.

SECTION ON PHARMACEUTICAL ECONOMICS

(Flash "Co.")

Chairman, Joseph H. Goodness; Vice-Chairman, Samuel Shkolnik; Secretary, Clarence M. Brown; Delegate to the House of Delegates, B. Olive Colc.

First Session, Wednesday, May 8th, 2:30 P.M.,
Flemish Room

Chairman's Address—Joseph H. Goodness.
Report of the Secretary, Clarence M. Brown.
Appointment of Committees.

PAPERS

1. "The Economic Effect of the Federal Food, Drug and Cosmetic Act upon the Retail Pharmacist," Lawrence Templeton.
2. "The Time and Duty Analysis of the Retail Pharmacist's Activity," H. C. Nolen, C. M. Brown and J. Angerman.

3. "Attracting More Women Purchasers to the Drug Store," Robert L. Swain.
4. "Proper Setting for Store Merchandise," D. B. R. Johnson.
5. "Comparative Effectiveness of Cardboard Boxes vs. Vials as Protection against Drug Deterioration," Simon Benson.
6. "The Weak Link," Clarence M. Brown.
7. "The Patman Chain Store Bill," George Archambault.

Second Session, Friday, May 10th, 2:30 P.M.,
Flemish Room

PAPERS

8. "The Pricing of Prescriptions," E. A. Swinyard and R. P. Clayton.
9. "Prescription Survey, VI. Prescription Prices," Marvin J. Andrews.
10. "An Unusual Pharmacy Display," Charles Ely.
11. "An Outline of a Course in Commercial Pharmacy," Robert W. Morrison.
12. "Suggestions and Improvements in the Pedagogy of Economics and Pharmaceutical Jurisprudence," J. A. Ortolan.

Open Forum: Patman Bill, Proprietaries and the Retail Pharmacist, Recent Surveys.

Reports of Committees.

Election and Installation of Officers.

Adjournment.

SECTION ON HISTORICAL PHARMACY

Flash "Hi."

Chairman, J. Hampton Hoch; *Vice-Chairman,* Ivor Griffith; *Secretary,* L. F. Jones; *Delegate to the House of Delegates,* W. T. Bradley; *Historian,* E. G. Eberle.

A brief Memorial Meeting will be held during the Second General Session of the A. P. H. A. on Thursday forenoon.

First Session, Wednesday, May 8th, 2:30 P.M.,
East Parlor

Chairman's Address—J. Hampton Hoch.

Secretary's Report—L. F. Jones.

Historian's Report (in abstract)—E. G. Eberle.

Executive Committee Report—W. T. Bradley.

Appointment of Committees.

PAPERS

1. "The Mortar as a Pharmaceutical Sign, Ornament and Utensil," Dr. George Urdang and F. W. Nitardy.
2. "A History of Bland's Pills," M. L. Neuroth and C. O. Lee.
3. "Faience and Pharmacy," Dr. George Urdang and F. W. Nitardy.
4. "History of Pharmacy in the United States from 1821 to 1900," Henry Colle.
5. "The Examination of and Standards for Imported Drugs from 1790-1908," Lyman F. Kebler.
6. "Le Clergé et la Pharmacie," Karl L. Kaufman.
7. "The Most Comprehensive Food and Drug Bill Introduced into the United States Congress by William H. F. Lee (May 31, 1837 to October 15, 1891) Soldier, Agriculturist and Legislator," by Lyman F. Kebler.

Second Session, Friday, May 10th, 2:30 P.M.,
East Parlor

Report of Delegate to House of Delegates—W. T. Bradley.

Report of Committee to Study Courses in History of Pharmacy—C. O. Lee.

PAPERS

8. "The Progress of Pharmacy in Great Britain," Leslie G. Matthews.

Symposium on "Teaching the History of Pharmacy."

Unfinished Business.

Report of Nominating Committee.

Election and Installation of Officers.

Final Business.

CONFERENCE OF PHARMACEUTICAL ASSOCIATION SECRETARIES

FOURTEENTH ANNUAL MEETING

President, Mrs. C. B. Miller; *First Vice-President,* J. M. Plaxco; *Second Vice-President,* J. J. Shine; *Secretary-Treasurer,* J. Lester Hayman; *Delegate to the House of Delegates,* Jos. J. Shine; *Members of the Executive Committee:* Irl Brite, Otis F. Cook, P. R. Loveland.

First Session, Wednesday, May 8th, 2:30 P.M.,
West Parlor

Call to Order.

Calling the Roll.

Reading the Minutes.

President's Address—Mrs. C. B. Miller.

Appointment of Committees.

Report of Officers.

Reading of Communications.

Report of Committee on Membership.

Subjects for Discussions.

1. "Legislation," Joe Shine, Illinois.
"Accomplishments of City Ordinances," A. W. Morrisson, Florida.
"Chain Store Tax Laws," Al Fritz, Indiana.
"Pharmacy Laws," Joe Shine, Illinois.
"Food, Drug and Cosmetic Laws," R. S. Lehman, New York.
"Why Texas Repealed Barbiturate Law," W. J. Danforth, Texas.
"State Uniform Narcotic Laws," J. W. Slocum, Iowa.
"Loss Leader Legislation," Walter Gnerich, California.
"Lobbying," Clara B. Miller, Kansas.
2. "Streamlined Conventions," Jesse Slocumb, Minnesota.
3. "Physician and Government Owned Pharmacies," Jack Lynch, Oregon. Government Owned Pharmacy, Glendale, Wisconsin.
4. "Publications," J. G. Beard, North Carolina.

Second Session, Friday, May 10th, 2:30 P.M.,
West Parlor

5. "Fair Trade," Victor Keys, Ohio.
Non-Fair Trade Manufacturers, Profits, Deals, Gifts, 10% Proposition, Non-Fair Trade States.
6. "George-Deen Educational Program," Earle Gardeman, Utah.
7. "Radio Education," H. E. Henderson, Washington.
8. "State Board of Pharmacy Cooperation," Irl Brite, Arkansas.
9. "Advantages of Pharmacist on State Boards of Health," Prescott Loveland, New Jersey.

10. "Finances, Jennings Murphy," Wisconsin.
11. "Inter-Professional Relations," J. Lester Hayman, West Virginia.
12. "Captain Plan of Organization," Chauncey Rickard, Pennsylvania.
13. "Problems Confronting Secretaries Nationally," E. F. Kelly, Maryland.
14. "Relief as It Affects the Pharmacist," J. J. Lynch, Idaho.

Continuation of Discussions.
Election of Members.
Election of Officers.
Miscellaneous Business.
Unfinished Business.
Installation of Officers.
Adjournment.

CONFERENCE OF PHARMACEUTICAL LAW ENFORCEMENT OFFICIALS

TWELFTH ANNUAL MEETING

Chairman, R. P. Fischelis; Secretary, M. N. Ford; Delegate to the House of Delegates, F. C. Schaefer.

First Session, Monday May 6th, 8:00 P.M., Flemish Room

Call to Order.
Minutes of 1939 meeting
Report of Secretary-Treasurer, M. N. Ford
Appointment of Nominating Committee.
Appointment of Special Committees.
Address of the Chairman, Robert P. Fischelis

SYMPOSIUM, "TECHNIQUES OF DRUG LAW ENFORCEMENT"

Guest Speaker, Walter G. Campbell, Chief Food and Drug Administration, U. S. Department of Agriculture.

Discussion by Robert L. Swain, Chairman-Emeritus, Conference of Pharmaceutical Law Enforcement Officials; George Mather, Secretary, New York Board of Pharmacy; Sylvester H. Dretzka, Secretary, Wisconsin Board of Pharmacy; A. L. I. Winne, Secretary, Virginia Board of Pharmacy, and others.

Second Session, Tuesday, May 7th, Flemish Room

(Immediately following the Final Session of the National Association of Boards of Pharmacy—about 4:00 P.M.)

SYMPOSIUM ON PHARMACY LAW ENFORCEMENT PROBLEMS

(Speakers to Be Announced)

1. "Granting and Withholding Permits."
2. "Regulating the Sale of Vitamins."
3. "The Need for Uniformity and Consistency in Legal Definitions."
4. "The U. S. P. and N. F. as Aids or Hindrances to Pharmacy Law Enforcement."

Resolutions.
Reports of Committees.
Election and Installation of Officers.
Adjournment.

CONFERENCE OF STATE COMMITTEES ON U. S. P.-N. F. PROMOTION

Chairman, Marvin J. Andrews; Secretary, Charles V. Selby.

Thursday, May 9th, 1:30 P.M., East Parlor

1. "A Promoting Program for U. S. P. and N. F. Preparations," C. B. Jordan.
2. "The Promotion of Professional Relations by a School of Pharmacy," W. D. Strother.
3. "Promotion in Mississippi," Charles E. Wilson.
4. "Promotion in Georgia," Sam J. Coleman.
5. "Promotion of U. S. P. and N. F. Preparations from a Marketing Standpoint," J. W. Snowden.

CONFERENCE OF PROFES- SIONAL PHARMACISTS

Monday, May 6th, 9:30 A.M., Green Room

Thursday, May 9th, 2:30 P.M., Jefferson Room

SYMPOSIUM ON PROFESSIONAL PHARMACY

1. "Effect of Commercialism on Pharmacy," Milo A. Chehak.
2. "The Menace of the Dispensing Doctor to Professional Pharmacy," Max N. Lemberger.
3. "Professional Pharmacists and Pharmacy," A. L. Malmö.
4. If a distinction be made between professionally-minded and commercially-minded pharmacists, how would it affect:
 - (a) Public Health, Charles V. Selby.
 - (b) Those stores that can render a complete pharmaceutical service and those stores that cannot render a complete pharmaceutical service, Thomas Roach
5. "A suggested Program for the Further Advancement of Professional Pharmacy," Leonard J. Piccoli.
6. Report of the Committee on Organization.

THE PLANT SCIENCE SEMINAR

EIGHTEENTH ANNUAL MEETING

Chairman, J. Hampton Hoch; Vice-Chairman, J. E. Seybert; Secretary-Treasurer, Elmer H. Wirth; Local Secretary, J. A. Reese; Council Member, Marin S. Dunn.

Saturday, May 11th

- 2:00 P.M. Trip to Maymont Park, under direction of Dr. J. A. Reese.
- 8:00 P.M. Business Session. Baruch Auditorium. Presentation of Reports. Reading of Papers. Address, "The Flora of Hawaii, Samoa, Fiji, New Zealand and Australia," illustrated with over 200 Kodachrome slides, Marin S. Dunn. Dr. Dunn will talk informally about his experiences in the South-Sea Islands last summer.

THE NATIONAL CONFERENCE ON PHARMACEUTICAL RESEARCH

EIGHTEENTH ANNUAL MEETING

Chairman, Wm. J. Husa; *Vice-Chairman*, H. W. Youngken; *Secretary*, John C. Krantz, Jr.; *Treasurer*, Fitzgerald Dunning; *Executive Committee*, Geo. D. Beal, James C. Munch, Francis E. Bibbins.

First Session, Tuesday, May 7th, 2:00 P.M., Salon
2:00 P.M. Call to Order by the Chairman.
2:01 P.M. Opening Remarks by the Chairman.
2:04 P.M. Appointment of Nominating Committee.
2:05 P.M. Reports of Officers.

SYMPOSIUM ON CHEMICAL CONTROL

2:15 P.M. "Chemical Control and the Pharmacopoeia," George D. Beal.
2:45 P.M. "Chemical Control in a State Department," W. F. Reindollar.
3:15 P.M. "Chemical Control in Industry," John F. Ross.
3:45 P.M. "The Teaching of Chemical Control," Arthur Osol.
4:45 P.M. Roll Call of Delegates.
4:50 P.M. Election and Installation of Officers.
5:00 P.M. Adjournment.
6:00 P.M. Annual Dinner.
7:00 P.M. Address: "Changing Trends in Chemotherapeutic Agents," Dr. Walter Hartung, Professor of Pharmaceutical Chemistry, School of Pharmacy, University of Maryland.

THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

FORTY-FIRST ANNUAL MEETING

President, Chas. H. Rogers; *Vice-President*, M. L. Jacobs; *Secretary-Treasurer*, Zada M. Cooper; *Chairman of the Executive Committee*, Ernest Little.

Sunday, May 5th

8:00 P.M. Meeting of the Executive Committee Library.

Monday, May 6th

9:00 A.M. Meeting of the Executive Committee Library.

9:30 A.M. Conferences of Teachers.

1:30 P.M. First Session—Business Jefferson Room.

6:00 P.M. Annual Dinner. Auditorium.

8:00 P.M. Second Session—Conferences of Administrative Officers, Professors and Instructors. Jefferson Room and Salon.

CONFERENCE OF TEACHERS OF PHARMACY

Chairman, W. A. Jarrett; *Vice-Chairman*, H. Evert Kendig; *Secretary*, Clark T. Eidsmoe.

Monday, May 6th, 9:30 A.M., Jefferson Room

1. "An Outline for a Course in Manufacturing Pharmacy," Adley B. Nichols.
2. "Is Extensive Equipment Necessary for Teaching Manufacturing Pharmacy, or Can Much of It Be Taught by Lecture without Equipment?" Edward D. Davy.
3. "Should Colleges of Pharmacy Which Do Not Have Hospital Connections Attempt to

Offer Courses in Manufacturing Pharmacy?" H. George DeKay.

4. "Should the Teacher of Manufacturing Pharmacy Have Had Actual Experience in the Commercial Manufacture of Pharmaceuticals?" James N. Etteldorf.
5. "Are Graduates of Colleges of Pharmacy Where Manufacturing Pharmacy Is Taught Equipped to Handle Manufacturing Problems?" F. E. Bibbins.
6. "Latin in Prescription Writing," Elmer L. Plein.
7. "Practical Dispensing as Taught at the Medical College of Virginia," Thomas D. Rowe.

CONFERENCE OF TEACHERS OF CHEMISTRY

Chairman, H. George DeKay; *Vice-Chairman*, F. Scott Bukey; *Secretary*, George W. Hargreaves

Monday, May 6th, 9:30 A.M., Salon

1. "Should Separate Courses Be Offered in Drug Assay and Quantitative Analysis?" Lloyd M. Parks.
2. "A Research Chemist Looks at the Pharmacy Curriculum," F. Scott Bukey.

CONFERENCE OF TEACHERS OF PHARMACOGNOSY AND PHARMACOLOGY

Chairman, L. David Hiner; *Vice-Chairman*, J. A. Reese; *Secretary*, A. John Schwarz.

Monday, May 6th, 9:30 A.M., East Parlor

1. "Should Chemical Structure Be Included in a Course on Properties of Drugs?" B. V. Christensen.
2. "What Is the Place of Bio-Assay in the Pharmacology Course?" Harold G. O. Holck.
3. "What Should Be Included in a Laboratory Course in Pharmacology, Toxicology and Physiology?" Wallace White.
4. "How Can Pharmacognosy Be Correlated with Courses in Pharmacodynamics and Materia Medica?" Leroy D. Edwards.
5. "What Should Be Omitted from Most of the Present Courses in Pharmacognosy?" George W. Fiero.
6. "What Apparatus Is Requisite for a Well-Equipped Laboratory in Pharmacognosy?" Elmer H. Wirth.
7. "How May Instruction in Physical Properties Best Be Presented?" Marin S. Dunn.
8. *In Memoriam* for Alexander Tschirch, Father of Pharmacognosy.

CONFERENCE OF TEACHERS OF PHARMACEUTICAL ECONOMICS

Chairman, B. Olive Cole; *Secretary*, John V. Connor.

Monday, May 6th, 9:30 A.M., West Parlor

1. "A Practical Viewpoint of Pharmaceutical Economics," F. D. Lascoff.
2. "The Commercial Course Equipment of the Schools of Pharmacy," C. Leonard O'Connell.
3. "The Teaching of Salesmanship to Pharmacy Students," John F. McCloskey.
4. "How Efficient Is Secondary School Training in Arithmetic?" Lloyd L. Boughton.

SESSIONS OF THE ASSOCIATION

First Session, Monday, May 6th, 1:30 P.M.,
Jefferson Room

Roll Call.

Appointment of Committee on Resolutions.

Appointment of Nominating Committee.

Appointment of Auditing Committee.

Address of the President, Charles H. Rogers.

Report of the Secretary-Treasurer, Zada M. Cooper

Report of the Executive Committee, Ernest Little.

Reports of Standing Committees:

- (1) Committee on Educational and Membership Standards, B. V. Christensen.
- (2) Committee on Curriculum and Teaching Methods, George L. Webster.
- (3) Committee on Activities for Alumni, George W. Hargreaves.
- (4) Delegates to the American Council on Education, Rufus A. Lyman.
- (5) Committee on Relation of Boards and Colleges, Howard C. Newton.
- (6) Committee on Libraries, Charles O. Lee.
- (7) Committee on Problems and Plans, Rufus A. Lyman.

Monday, May 6th, 6:00 P.M.

Joint Annual Dinner with N. A. B. P. Auditorium.

Address, Dr. Thomas W. Murrell.

Second Session, Monday, May 6th, 8:00 P.M.,
Jefferson Room and Salon

8:00 P.M. Conference of Administrative Officers (Executive Session), Charles H. Rogers, presiding.

8:00 P.M. Conference of Professors and Instructors (Executive Session), Dr. Eldin V. Lynn, presiding.

10:00 P.M. Joint Conference of Administrative Officers, Professors and Instructors.

Tuesday, May 7th, 9:30 A.M., Auditorium

**JOINT SESSION OF THE AMERICAN
PHARMACEUTICAL ASSOCIATION, THE
NATIONAL ASSOCIATION OF BOARDS
OF PHARMACY AND THE AMERICAN
ASSOCIATION OF COLLEGES OF
PHARMACY**

(See program National Association Boards of Pharmacy.)

Third Session, Tuesday, May 7th, 2:00 P.M.,
Jefferson Room

1. Recommendations from the Conferences of Teachers.
2. Report of the Editor of the American Journal of Pharmaceutical Education, Rufus A. Lyman.
3. Reports of Committee on Predictive and Achievement Tests, Carl J. Klemme.
4. Report of Committee on Informative Literature, B. V. Christensen.
5. Report on the Eighth Educational Conference, Charles W. Ballard.
6. National Pharmacy Week, John E. O'Brien.
7. Reports of Special Representatives:
 - (1) National Drug Trade Conference, A. G. DuMez.
 - (2) Druggists Research Bureau, Paul C. Olsen.
 - (3) National Association of Retail Druggists, Charles V. Netz.
 - (4) National Wholesale Druggists Association, Robert C. Wilson.
8. Report of the Historian, Edward Kremers.
9. Report of the Committee on Resolutions.
10. Report of the Auditing Committee.
11. Miscellaneous Business.
12. Election of Officers.
13. New Business.
14. Executive Session.

**NATIONAL ASSOCIATION OF
BOARDS OF PHARMACY**

THIRTY-SEVENTH ANNUAL CONVENTION

President, P. H. Costello; Honorary President, Edward Kremers; Vice-President, C. L. Guthrie; Treasurer, J. W. Gayle; Secretary, H. C. Christensen.

First Session, Monday, May 6th, 9:30 A.M., Flemish Room

1. Call to Order, President P. H. Costello.
2. Roll Call, Secretary H. C. Christensen.
3. Appointment of Committee on Credentials, President Costello.
4. President's Address, P. H. Costello
5. Report of Executive Committee, George A. Moulton.
6. Report of Secretary, H. C. Christensen.
7. Report of Treasurer, J. W. Gayle.
8. Appointment of Nominating Committee, President Costello.
9. N. A. B. P. Banquet Announcement.
10. Officers' Luncheon for new members only, 12:30 P.M.

Second Session, Monday, May 6th, 1:30 P.M.,
Flemish Room

1. Report of Legislative Committee, Charles R. Bohrer.
2. Report of Committee on National Legislation, L. M. Kantner.
3. Report of Committee on Prerequisite Legislation, John F. Walsh.
4. Report of Publicity Committee, E. J. Prochaska
5. Report of Grievance Committee, Vince Harrington.
6. Report of Committee on Minimum Standards of Technical Equipment, A. C. Taylor.
7. Report of Committee on Study & Correlation of Practical Experience Requirements, R. P. Fischelis.
8. Report of Special Committee on Practical Examination, A. L. I. Winne.
9. Panel Discussion: "A Restatement of the Functions and Objectives of a State Board Pharmacy Examination," Edward Kremers, R. P. Fischelis and R. L. Swain.

**JOINT BANQUET OF N. A. B. P. AND
A. A. C. P.**

Monday, May 6th, 6:00 P.M., Auditorium

Speaker: Dr. Thomas W. Murrell of the University of Virginia

**JOINT SESSION WITH AMERICAN ASSOCIATION
OF COLLEGES OF PHARMACY AND
AMERICAN PHARMACEUTICAL
ASSOCIATION**

Tuesday, May 7th, 9:30 A.M., Auditorium

1. Fairchild Scholarship Committee, E. G. Eberle.
2. Committee on Pharmaceutical Syllabus, H. M. Burlage.
3. American Council on Pharmaceutical Education, A. G. DuMez.
4. Committee on the Status of Pharmacists in the Government Service, H. Evert Kendig.
5. Committee on Modernization of Pharmacy Laws, Robert L. Swain.
6. Committees on Professional Relations
 - (1) College Activities, George C. Schicks
 - (2) State Activities, Charles B. Jordan.
 - (3) Dental Pharmacy, George C. Schicks

**Final Session, Tuesday, May 7th, 2:00 P.M.,
Flemish Room**

1. Reports of District Chairmen
 - Dist. No. 1.....Wm. B. Shangraw
 - Dist. No. 2.....L. M. Kantner
 - Dist. No. 3.....W. H. Rose
 - Dist. No. 4.....E. A. O'Harrow
 - Dist. No. 5.....F. W. Moudry
 - Dist. No. 6.....R. E. Phillips
 - Dist. No. 7.....A. F. Peterson, Jr.
 - Dist. No. 8.....N. W. Stewart
2. Report of Committee on Constitution and By-Laws, C. L. Guthrie.
3. Report of Resolutions Committee, A. C. Taylor.
4. Reports of Special Committees.
5. Unfinished Business.
6. New Business.
7. Report of Nominating Committee.
8. Election and Installation of Officers.

IMPORTANT

Immediately following the conclusion of the National Association of Boards of Pharmacy program, the Final Session of the Conference of Pharmaceutical Law Enforcement Officials will be held in this room. All members of the National Association of Boards of Pharmacy and the Conference are invited to participate.

GENERAL ENTERTAINMENT PROGRAM

(Please wear your Convention Badge and have tickets with you.)

Sunday afternoon and evening, May 5th

8:00 P.M. Musicale, Armstrong Choir (75 strong).
Miss Nancy Durrett, prodigy violinist, and other features.
Place: Lobby, Jefferson Hotel.

Monday, May 6th

12:30 P.M. Luncheon—Ladies only.
Place: Jefferson Hotel dining room.
2:00 P.M. Bridge party and prizes—Ladies only.
Place: Southern Dairies, Jefferson Street, between Main and Cary Streets.
8:00 P.M. Moving pictures—Ladies only.
"Shenandoah Park"—1 reel, 15 minutes, silent.
"George Washington's Virginia"—4 reels, 40 minutes, sound.
Place: Green Room, Jefferson Hotel.

Tuesday, May 7th

10:00 A.M. Visit to tobacco and other plants leaving from Jefferson Hotel.
2:00 P.M. Visit to famous gardens, ladies only, leaving from Jefferson Hotel.
10:00 P.M. Reception and dance—Receiving line including the Governor and other dignitaries, and representatives of various civic, commercial and educational bodies.
Special entertainment.
Place: Jefferson Hotel Auditorium.

Wednesday, May 8th

10:00 A.M. Visit to tobacco and other plants, leaving from Jefferson Hotel.
4:00-6:00 P.M. Tea and visit to Museum—Ladies only. Leave from Jefferson Hotel.
Place: Valentine Museum, Eleventh and Clay Streets (Courtesy of the Valentine Meat Juice Company).
7:30 P.M. President's dinner (Joint Banquet).
Music. Address, Senator Harry F. Byrd, "The Trend of Legislation at Washington."
Place: Auditorium.

Thursday, May 9th

11:00 A.M. Illustrated Lecture, "Virginia Homes and Gardens," Dr. W. T. Sanger. Leave from Jefferson Hotel.
Place: Baruch Auditorium, Egyptian Building, Medical College of Virginia.
Luncheon—Ladies.
4:00-6:00 P.M. Reception and Tea by His Excellency, Governor James H. Price and Mrs. Price. Leave from Jefferson Hotel.
Place: Governor's Mansion.

Friday, May 10th

11:00 A.M. Fashion Show. Leave from Jefferson Hotel.
Place: Miller and Rhoads.
Luncheon followed by informal visits to points of interest in Richmond—Ladies only.
9:30-12:30 P.M. Final ball, Auditorium.

Saturday, May 11th

Trip to Battlefield Parks, leaving in the late morning or early afternoon from Jefferson Hotel.

Sunday Morning, May 12th

Trip to Williamsburg: special registration fee of fifty cents.

COURTESY TOURS

Visitors are urged to go to the historic spots of Richmond during free time. A number of Richmond citizens are offering the use of their automobiles for this purpose. Those who wish to take advantage of this opportunity are asked to sign the register provided at the information booth. There is no charge for these tours.

PLEASE REGISTER FOR ALL FUNCTIONS

To help the Planning Committee make arrangements for all guests, please register at the Registration Desk for all functions which you plan to attend. Example: If you wish to take the Battlefield Tour on Friday, you should sign up by Thursday noon. This will enable us to have enough cars available. The same procedure should be followed for all luncheons, banquets and meetings where it is necessary that the number attending be known beforehand. Your cooperation in this matter will greatly facilitate arrangements.

Registration for all functions will be at the Registration Desk, except for the Courtesy Tours and the Williamsburg Trip, which will be handled at the Information Booth.

CHAIRMEN OF COMMITTEES

General Chairman and Local Secretary—L. C. Bird.
Planning—L. C. Bird.
Entertainment—Harvey B. Haag.
Plant Trips—W. R. Harlan.
Public Relations—S. S. Negus.
Publicity—W. G. Tarrant, Jr.
Registration—W. E. Locke.
Exhibit—Eldon Roberts.
Williamsburg Trip—Garnett W. Vaughan.
Finance—F. J. Britton.
Housing—R. R. Rooke.
Meetings and Meeting Rooms—J. A. Reese.
Information and Transportation—Thomas D. Rowe.
Hospitality (Men)—Allen R. Cross.

LADIES' COMMITTEE

Hospitality (Ladies)—Mrs. William T. Sanger.

PROGRAM* OF THE THIRTEENTH MEETING OF THE UNITED STATES PHARMACOPŒIAL CONVENTION

At the Willard Hotel, Washington, D. C., Tuesday, Wednesday, May 14 and 15, and Thursday, May 16, 1940 if Necessary

First Session

Tuesday, May 14th

9:30 A.M.

Opening of the Convention by the President, Dr. Walter A. Bastedo.

Roll Call as Supplied by the Committee on Credentials.

Approval by the Convention of the List of Delegates.

Introduction of Visiting Foreign Delegates.

The President's Address, Walter A. Bastedo, M.D.

Review of Pharmacopœial Affiliations.

"The Relation of the Pharmacopœia to the Medical Profession," Dr. Morris Fishbein.

"The Relation of the Pharmacopœia to the Pharmaceutical Profession," Dr. E. F. Kelly.

"The Relation of the Pharmacopœia to the Food and Drug Administration," Mr. W. G. Campbell.

Announcement of Rules for Facilitating Business.

Memorial List of Prominent Pharmacopœial Workers of the Last Decade, by the Secretary.

Report of the Chairman of the Board of Trustees.

Consideration of Proposed Amendments to the Constitution and By-Laws.

Report of the Secretary of the Board of Trustees.

Report of the Treasurer of the Convention.

Report of the Chairman of the Committee of Revision.

Final Report of the Committee on Credentials.

Naming of the Nominating Committee by Accredited Member Organizations.

General and New Business.

Second Session

Wednesday, May 15th

9:30 A.M.

Minutes of the Preceding Session.

Report of the Secretary of the Pharmacopœial Convention.

Receipt of Resolutions or Contributions in Writing by Members of the Convention.

Report of the Nominating Committee.

Election of the Officers of the Convention, Board of Trustees and the General Committee of Revision.

Installation of the Officers for 1940-1950.

Consideration of General Principles to Guide the U. S. P. Revision.

General and New Business.

Adjournment.

* This advance announcement of the U. S. P. program is subject to additions and revisions.

CONDENSED PROGRAM* OF THE U. S. P. REVISION CONFERENCES PRECEDING THE 1940 PHARMACOPŒIAL CONVENTION

At the Willard Hotel, Washington, D. C., Monday, May 13, 1940

10 A.M.

Botany and Pharmacognosy—Room 1.
Extracts, Fluidextracts, Tinctures, Waters, Solutions, Spirits, Syrups and Elixirs—Room 2.
Inorganic and Organic Chemicals, First Session—Room 3.
Statistical Methods as Applied to Biological Assays—Room 4.
Volatile Oils—Room 5.

2 P.M.

Biological Assays—Room 1.
Cerates and Ointments—Room 2.
Inorganic and Organic Chemicals, Second Session—Room 3.
Hormones—Room 4.
Proximate Assays—Room 5.
Vitamins—Room 6.

8 P.M.

U. S. P. Scope, Therapeutics, Nomenclature, etc.—Convention Hall.
Preservation and Packaging of Pharmacopœial Products—Room 1.

* This advance announcement of the U. S. P. Pre-Convention program is subject to additions and revisions.

BOTANY AND PHARMACOGNOSY

Willard Hotel, Room 1—10 A.M.

Edwin L. Newcomb, Ph.M., Chairman of the U. S. P. Sub-Committee on Botany and Pharmacognosy, presiding

"Revision of the Official Definitions in the Monograph on Aconite and Other Drug Plants," William J. Bonistel, New York, N. Y.
"Scientific Color Names in the U. S. P. and N. F.," E. N. Gathercoal, Chicago, Ill., and Kenneth L. Kelly, Washington, D. C.
"Comments and Suggestions on the Standards for U. S. P. Vegetable Drugs," Marin S. Dunn, Philadelphia, Pa.
"Suggestions for the Improvement of U. S. P. Vegetable Drug Standards," Heber W. Youngken, Boston, Mass.

EXTRACTS, FLUIDEXTRACTS, TINCTURES, WATERS, SOLUTIONS, SPIRITS, SYRUPS AND ELIXIRS

Willard Hotel, Room 2—10 A.M.

Wilbur L. Scoville, Sc.D., and H. A. Langenhan, Ph.D., Chairmen, of the U. S. P. Sub-Committees revising this group of pharmaceutical preparations, presiding

"Suggestions for Revision of Pharmaceutical Processes and Tests in the U. S. P. XI," Ivor Griffith, Philadelphia, Pa.
"Glycyrrhiza Preparations of the U. S. P.," Percy A. Houseman, Camden, N. J.
"Drug to Extract Relationships," W. Paul Briggs, Washington, D. C.
"New Data on Fluidextract of Senna," C. O. Lec, Lafayette, Ind.
"The Determination of the Alcoholic Content of Galmicals," Sigmund Waldbott, Cincinnati, Ohio.

INORGANIC AND ORGANIC CHEMICALS

Willard Hotel, Room 3—First Session, 10 A.M.

John C. Krantz, Chairman of the U. S. P. Sub-Committee on Inorganic Chemicals, presiding
"Reagents and Solutions of the Pharmacopœia," Ernest Little, Chairman of the U. S. P. Sub-Committee on Reagents and Test Solutions, Newark, N. J.

"Standardization of Sodium Thiosulfate Tenth-Normal Volumetric Solution," F. A. Lewis, Washington, D. C.

"Significance of the Pharmacopœia to the Medicinal Gas Industry," W. P. Uhler.

"Heavy Metal Tests of the U. S. P.," Joseph Rosin, Rahway, N. J.

"Suggestions for Revision of Chemical and Physical Standards and Tests," Arthur Osol, Philadelphia, Pa.

"A Suggestion for the Determination of Melting Points," Charles O. Wilson, Washington, D. C.

"Observations on Tincture of Iodine, U. S. P. XI, Second Supplement, and on Mild Tincture of Iodine, U. S. P. XI," C. O. Ewing, Boston, Mass.

"Limitation of the Particle Size Test for Barium Sulfate," John J. Corcoran, Brooklyn, N. Y.

"A Proposed Particle Size Determination Test," John J. Corcoran, Brooklyn, N. Y.

"Dithizone Limit Test for the Estimation of Lead and Thallium in Pharmaceutical Chemicals," Karl Bambach, Cincinnati, Ohio.

STATISTICAL METHODS AS APPLIED TO BIOLOGICAL ASSAYS

Willard Hotel, Room 4—10 A.M.

Erwin E. Nelson, M.D., Chairman of the Special Research Committee on Digitalis Assays, presiding

"The Concepts Underlying Biological Assay in Reference to Their Quantitative Aspects," C. I. Bliss, Cleveland, Ohio.

"The Application of Statistical Analysis, with Special Reference to Hormone Assays," C. W. Chapman, Baltimore, Md.

"The Application of Statistical Analysis, with Special Reference to Drug Assays," Lloyd C. Miller, Washington, D. C.

"The Application of Statistical Analysis with Special Reference to the Assay of Vitamins," C. A. Morrell, Ottawa, Canada.

"A Graphical Method for Calculating the Results of Bioassays," Edwin J. deBeer, Tuckahoe, N. Y.

"A Simple Statistical Method for the Determination of 50% Mortalities in Digitalis Assays," Harold N. Wright, Minneapolis, Minn.

VOLATILE OILS

Willard Hotel, Room 5—10 A.M.

Bernard V. Christensen, Chairman of the U. S. P. Sub-Committee on Volatile Oils, presiding

"Standards for Oil of Cassia (Cinnamon)," F. D. Dodge, New York, N. Y.

"Proposed Pharmacopœial Standards for Oil of Chenopodium," W. F. Peckham, New York, N. Y.

"New Data on Sandalwood Oil," Boston, Mass.

"Proposed Standards for Oil of Cade," G. V. Branigan, New York, N. Y.

"Volatile Oil of Mustard, Synthetic," W. S. Guthman and W. L. Terre.

"Oils of Peppermint and Spearmint," E. N. Gathercoal, Chicago, Ill.

BIOLOGICAL ASSAYS

Willard Hotel, Room 1—2 P.M.

- C. W. Edmunds, M.D., Chairman of the U. S. P. Sub-Committee on Biological Assays, presiding
- "Review of Bio-Assay Methods as Applied to Drug Standardization," C. W. Edmunds, Ann Arbor, Mich.
- "Collaborative Studies of the Digitalis Assay," Erwin E. Nelson, New Orleans, La.
- "Improvements in the U. S. P. Assay for Posterior Pituitary," E. M. K. Geiling, Chicago, Ill.
- "Studies of the Ergot Assay and Its Revision," Ralph G. Smith, Ann Arbor, Mich.
- "A Simple Statistical Method for the Determination of 50% Mortalities in Digitalis Assays," Harold N. Wright, Minneapolis, Minn.

CERATES AND OINTMENTS

Willard Hotel, Room 2—2 P.M.

- Leonard A. Seltzer, Sc.D., Chairman of the U. S. P. Sub-Committee on Cerates, Ointments and Miscellaneous Galenicals, presiding
- "Anti-Oxidants Relative to Their Preserving Action on Lard," Edward Schuler under direction of Dean Roland T. Lakey, Detroit, Mich.
- "Value of Hydrogenated Castor Oil as an Ointment Vehicle," George Fiero, Buffalo, N. Y.
- "Value of Cholesterol in Ointments with Proposed Formula," John Karagulis, Detroit, Mich.
- "Rose Water, Ointment Type," John Karagulis, Detroit, Mich.
- "Study of Colloidal Sulfur Ointment," Prof. C. O. Lee, Lafayette, Ind. Comments by Prof. R. T. Lakey, Detroit, Mich., Prof. E. P. Stout, Detroit, Mich. and Prof. B. A. Bialk, Detroit, Mich.
- "Water in Oil Emulsions," J. L. Powers, J. P. Leake, Washington, D. C. and N. H. Furman, Princeton, N. J.
- "Ointment Vehicles for Antiseptics," Louis Gershenfeld, Philadelphia, Pa.

INORGANIC AND ORGANIC CHEMICALS

Willard Hotel, Room 3—Second Session, 2 P.M.

- George D. Beal, Chairman of the U. S. P. Sub-Committee on Organic Chemicals, presiding
- "The Pharmacopœia and the Relationship of Its Methods of Analysis to the State Enforcement Official," William Reindollar, Baltimore, Md.
- "Analytical Procedures from the Point of View of a Federal Enforcement Official," A. G. Murray, Washington, D. C.
- "Determination of Iodine in Organic Combination," Estelle K. Johnson and Frederick F. Johnson, Pittsburgh, Pa.
- "A Suggested Change in the U. S. P. XI Method of Assaying Iodine," Ernest E. Ozhurn, Washington, D. C.
- "Suggested Changes in the Assay of Some Official Mercurous Compounds," Orin C. Western, Washington, D. C.
- "Surgical Dressings, Surgical Silk and Surgical Gut," George D. Beal, Pittsburgh, Pa.
- "Suggestion for Revision of Antiseptics, Surgical, and Biological Products," Louis Gershenfeld, Philadelphia, Pa.
- "Separation and Estimation of Aspirin, Caffeine, and Cinnamyl Ephedrine," L. H. Welsh, Washington, D. C.
- "General Observations on U. S. P. Chemical and Physical Standards and Tests," Joseph Rosin, Rahway, N. J.
- "The Detection of Unsaturates in Cyclopropane," Frederick K. Bell, Baltimore, Md.
- "Dextrose, U. S. P., Sterilization in Relation to Its

Quality," Wm. H. Doushness, Phillipsburg, N. J.

"Improvements in the Tests for U. S. P. Petroleum Products," V. F. Beyer, New York, N. Y.

HORMONES

Willard Hotel, Room 4—2 P.M.

- Charles L. Brown, M.D., Chairman of the U. S. P. Endocrine and Hormone Advisory Board, presiding
- "The Estrone Assay," E. A. Doisy, St. Louis, Mo.
- "The Androsterone Assay,"
- "The Progesterone Assay," Willard Allen, Rochester, N. Y.
- "The Chorionic Gonadotrophin Assay,"
- "The Chemistry of the Sex Hormones," Maximilian Ehrenstein, Philadelphia, Pa.
- "Prolactin Assay,"
- "Therapeutic Uses of Hormones," Leonard G. Rowntree, Philadelphia, Pa.

PROXIMATE ASSAYS

Willard Hotel, Room 5—2 P.M.

- C. B. Jordan, D.Sc., Chairman of the U. S. P. Sub-Committee on Botany and Pharmacognosy, presiding
- Opening Remarks, C. B. Jordan, Lafayette, Ind.
- "Proximate Assays—Their Requirements and Practical Uses," F. O. Taylor, Detroit, Mich.
- "The Need of Standardizing the Glycyrrhiza Preparations," Dr. Bernard Fantus and Miss Hattie A. Dyniewicz, Chicago, Ill.
- "Some Further Experiences with U. S. P. Assay of Nux Vomica," A. R. Bliss, Jr., Birmingham, Ala.
- "Remarks on the Assay of Mydriatic Drugs," Dr. George E. Ewe, Boston, Mass.
- "Assay of Capsicum," C. B. Jordan and collaborators, Lafayette, Ind.
- "Suggestions for Revision of the Proximate Assay Methods," John G. Roberts, Philadelphia, Pa.
- "The Assay of Aloes," A. C. Smith, Lafayette, Ind.

VITAMINS

Willard Hotel, Room 6—2 P.M.

- E. Fullerton Cook, M.Sc., Chairman of the U. S. P. Vitamin Advisory Board, presiding
- "Vitamin A Potency Determined by the Photo-Electric Fluorophotometer," Erich Loewenstein, New York, N. Y.
- "Extract of Tikitiki," Patrocínio Valenzuela, Felix Hocson, Amado Santos and Jesusa Concha, Manila, P. I.
- "McCollum and Prebluda Test for Vitamin B₁," Gloria D. Manalo and Patrocínio Valenzuela, Manila, P. I.
- "The Vitamin B₁ Potency of the Tikitiki Extract CPUP Brand," Segundino G. Jao, Manila, P. I.
- "Suggestions for the Revision of the Bio-Assays and Vitamins in the U. S. P. XI," Joseph W. E. Harrison, Philadelphia, Pa.
- "Spectrographic Measurements on Vitamin A Materials," Ronald L. McFarlan, Philip K. Bates and Edward C. Merrill, Boston, Mass.
- "A Simplified Liver Extract Component of the U. S. P. Vitamin B₁ Assay Diet," David Klein, Chicago, Ill.

U. S. P. SCOPE, THERAPEUTICS, NOMENCLATURE, ETC.

Willard Hotel, Convention Hall—8 P.M.

- C. W. Edmunds, M.D., Vice-Chairman of the U. S. P. Committee of Revision, presiding
- "The Policies and Accomplishments of the U. S. P. Anti-Anemia Preparations Advisory Board," William B. Castle, M.D., Boston, Mass.

"The Standardization of Vitamins and Vitamin Assays by the U. S. P.," E. M. Nelson, Washington, D. C.

"Guiding Principles for U. S. P. Nomenclature," A. G. DuMez, Chairman, U. S. P. Sub-Committee on Nomenclature, Baltimore, Md.

"Suggestions for Increasing the Usefulness of the U. S. P. by Extending Its Scope," John C. Krantz, Jr., Baltimore, Md.

"The Developments and Needs for the Standardization of Surgical Products," Frank L. Meleney, New York, N. Y.

"Extension of U. S. P. Use in Pan-American Countries," Amelia de Mesa Ponce, Havana, Cuba.

"The Therapeutic Range of the Mercurial Diuretics," Carl Pfeiffer and Charles Roby, Chicago, Ill.

"Additions to the U. S. P. Biologicals," George W. McCoy, New Orleans, La.

"Contributions made by the Spanish U. S. P. toward Uniformity in Medicinal Standards among the Pan-American Republics," A. A. Moll, Washington, D. C.

"Totaquina," Joaquin Marañon and Consuelo Gonzales, Manila, P. I.

PRESERVATION AND PACKAGING OF PHARMACOPŒIAL PRODUCTS

Willard Hotel, Room 1—8 P.M.

H. V. Army, Ph.D., Chairman of the U. S. P. Committee on Deterioration and Storage, presiding

"The Packaging of Hygroscopic and Efflorescent Chemicals," John F. Ross, St. Louis, Mo.

"Storage of Ointment of Rose Water in Collapsible Tubes," D. B. Strohm, Edgewater, N. J.

"The Packaging of Crude Drugs," S. B. Penick, Jr., New York, N. Y.

Dr. Kremers Honored

On April 4th Dr. Edward Kremers was honored by the pharmacists of Wisconsin in a testimonial banquet held in Memorial Union. On this occasion Douglas E. Hunt, of Wautoma, president of the State Pharmaceutical Association, was toastmaster. An engraved plaque was presented to Dr. Kremers by Sylvester H. Dretzka, secretary of the state board of pharmacy. The plaque was accepted by Dr. Arthur H. Uhl, director of the School of Pharmacy, University of Wisconsin; and a description of same was given by John O. Van Koert, director of metal work art at the university.

After presentation of the folio by Jennings Murphy, secretary of the association, Dean Charles H. Rogers, of the University of Minnesota College of Pharmacy, spoke in tribute to Dr. Kremers; as also did Otto Templin, president of the Milwaukee County Veteran Druggists Association. Dr. Kremers made response in his usual delightful manner, and the evening closed with a reception for Dr. and Mrs. Kremers.

Transfer of the Food and Drug Administration

Under the fourth Reorganization Plan submitted to Congress on April 11, 1940, by President Roosevelt, the Food and Drug Administration in the Department of Agriculture and its functions, except those functions relating to the administration of the Insecticide Act of 1910 and the Naval Stores Act, are transferred to the Federal Security Agency and shall be administered under the direction and supervision of the Federal Security Administrator. A number of other transfers are provided for under this Plan and they will become effective sixty days after its submission, unless action is taken by the Congress in the meantime.

It has been expected that the Food and Drug Administration would be transferred to the Public

Health Service which is now a part of the Social Security Agency. It is apparently now intended to transfer the Administration as a unit. The Chief of the Administration will be known as Commissioner of Foods and Drugs which title is more in keeping with the position and will be directly responsible to the Social Security Administrator. Whether or not the Administration will be moved from its present location in the Department of Agriculture Building was not indicated.

On account of the transfer the hearings set for April 29th on the proposed regulation of foods represented for special dietary uses, by humans, have been cancelled.

Great Quantities of Medical Stores Bought by Red Cross for War Relief

Medicines, hospital and surgical supplies loom large in American Red Cross war relief purchases, according to a recent tabulation of articles which that organization is furnishing its sister societies in war-affected countries to assist them in minimizing the sufferings consequent to hostilities.

Analysis of the tabulation, dated April 1st, reveals the following purchases:

- 500,000 tablets of sulfanilamide.
- 266,000 tablets of sulfapyridine.
- 100 tons of other assorted drugs.
- 23,000 surgical instruments.
- 38 X-ray units.
- 32 generating motors for X-ray units.
- 1 100-bed hospital unit, containing 700 items.
- 25 hospital tents each of 50-patient capacity.
- 11 motor ambulances.
- 1,500,000 yards of surgical gauze.
- 92,000 pounds of absorbent cotton for medical purposes.
- 276,000 yards of bed sheeting and large quantities of soap, toothbrushes and other similar products.

Why Pharmacognosy is a Necessity in the Training of the Pharmacy Student and for the Work of the Practicing Pharmacist

The term pharmacognosy conveys to the mind of a pharmacist a multitude of varied impressions. Some may be led to reminisce of school days spent in well-stocked crude drug laboratories, while others are presented with the challenge of a much broader subject yet to be mastered. Pharmacognosy has always been a part of the pharmaceutical curriculum, and rightly so, since from the very beginning this profession has constantly sought to improve the state of man through the use of crude vegetable and animal drugs and their preparations. Biologicals, vitamins, endocrine products and chemotherapy have not changed this picture but have merely extended the field of therapeutics in new directions.

To understand why a student takes a course in pharmacognosy, it is first essential to know what the course embraces. Early courses doubtless consisted of the ordinary routine of learning Latin titles, official definitions, constituents and doses and uses, which were essential to becoming registered. Today, we have become too practical to accept this as a goal, with the result that pharmacognosy is being developed with an eye to its future usefulness to the pharmacist regardless of what branch of the profession he may enter. This change in scope has necessitated some earnest thinking on the part of the teachers of pharmacognosy in order to bring a cultural subject into the realm of useful and practical studies.

Pharmacognosy and its relationship to pharmaceutical education is comparable to one of the basic substances essential to a building program. A veneer of brick may cover the steel supports, but there is no denying that these hidden girders maintain the structure. As a basic science, pharmacognosy represents one of these steel beams that will be rendered obscure by the veneer of merchandising. Nevertheless, it will continue to be a source of satisfaction in his every-day life. Teachers are no longer laboring under the impression that the retail pharmacist will collect his own crude drugs,

or that he will even stock them as such on his shelves. They do, however, have the impression that a professional man becomes such only when he possesses unusual training in his field, and that is what the study of pharmacognosy does.

As a retail pharmacist surveys numerous packages which adorn his shelves, it should be a great personal satisfaction to know he is capable of judging their contents. The label on the box of laxative pills reads that cascara and aloes are in the formula. Their acceptability is assured, for the pharmacist knows these drugs and the standards which govern them. Among the prescription room bottles are fluidextracts, tinctures, elixirs and isolated active principles. Preparations, yes, but back of each and every one there is a crude drug which had to be collected and prepared for market. It has a specific source, purity rubric, assay requirement and perchance a bit of interesting history, but, best of all, it has behind it two books which guaranteed its perfection before the drug was ever made up into those same preparations. True it is that the retail man cannot possibly master all of these details, but that should not lessen his desire to know nor the pride in his superior merchandise because it is done. The fact that pharmacognosy enables him to know these drugs and preparations better by being able to read intelligently the U. S. P. and N. F. monographs, alone would justify its being a required course.

To substantiate the claims that pharmacognosy has something to offer beyond the simple mastering of official titles, official definitions, constituents, assays, and doses and uses, attention is called to the following outline of instruction a student has covered upon the completion of his course in pharmacognosy.

1. General or pharmaceutical botany. (The detailed study of plant parts and their functions.)
2. Official definitions, sources, constituents, doses and uses of crude drugs.
3. Taxonomic consideration. (Identification and preparation of herbarium specimens.)

4. Medicinal plant cultivation. (Propagation, cultivation and harvesting crude drugs.)
5. Collection and preparation for the market of crude drugs.
6. Preservation of crude drugs and preparations.
7. Drug milling for such preparations as tinctures and fluidextracts.
8. Histology of vegetable and animal drugs.
9. Microanalysis of foods and drugs.
10. U. S. P. and N. F. monograph preparation and interpretation. Assay procedures.

Committee on Professional Relations—Third Report

By C. B. Jordan, Chairman

When my first letter asking for material was sent out, replies came in very slowly, but the second letter, I am glad to say, brought a deluge. It is unfortunate that all this material cannot be printed prior to the annual meeting in May because there are many excellent suggestions for the professional relations committee of any state that is anxious to develop a program. Each state, as indicated in the following reports, does its job a little differently than its neighbor, and therefore we have a wealth of suggestions.

COLORADO.—Mr. F. W. Kohler, Chairman: "Recently a well-known pharmaceutical leader made the following statement:

"An eminent physician in my city, whom I have known for a great many years, recently told me that in twenty-five years of practice in the same city, he had never been approached by a pharmacist on a professional subject."

"No doubt this situation could be repeated in a great many cities and neighborhoods throughout the country, however this committee is of the opinion that this state of affairs is not so obvious in Colorado. On a direct check-up throughout the entire state there seems to be a much closer relationship between the professions than has prevailed in the past. This is no doubt due to a great extent to the intensive detail work of the more reliable pharmaceutical houses which requires the pharmacist to keep up with the trend of the times and be constantly in a position to answer any and all of the questions the medical profession may call on him to answer. The advent of many professional pharmacies throughout the state has also brought a closer relationship between the professions and in many cases a very definite program of detail for these stores is being carried out. This, of course, brings the pharmacist in contact with the doctor, usually in his office, and tends to break down the fear that the druggist has in the past felt that he was not qualified to discuss products of technical nature with the physician.

"The great majority of physicians welcome the visits of the druggist to their offices as this keeps him better informed as to the up-to-date stock of new products that the druggist carries to meet the wants of the doctor. Serum therapy has become so popular with the profession that the druggist, who wishes to stay in the race, must keep them in stock and know the products, as well as the dosage and administration. When this situation is known to the doctor he does not hesitate to pick up his phone and call the pharmacist when he knows he can get the answer and get it right.

Actual student participation in carrying out the above program imparts to his training a professional aspect which separates him clearly and distinctly from the ordinary merchant. The retail pharmacist to-day knows his merchandise better than ever before, by virtue of which he safeguards the confidence of those whom he serves. He has a training in his own field that is possessed by no other professional man.

"Doctors are becoming more and more familiar with the fact that the drug profession is daily striving to better serve his patients. Quick delivery has played a very strong rôle in developing a closer relationship between the professions, and gives the pharmacist a good approach to the doctor when he cannot think of anything else that seems important.

"In many places the pharmacist is becoming the doctor's standby on advice that has slipped his mind due to the conglomeration of detail given him each and every day by a man that seldom contacts him more frequently than once or twice every two months.

"The relationship between the professions is becoming so close that the pharmacist does not in any way have to apologize for taking up the doctor's time as the doctor knows the pharmacist has something of importance to tell him.

"A closer relationship than ever before exists between the professions and it is to the advantage of every druggist to boost this still further and in so doing open up new roads of profit and friendship with the one profession that so vitally affects his business."

WASHINGTON.—Mr. Graham A. Condie, Inter-professional Relations Officer: "While the writer was president of our State Association in the year 1938 to 1939 I was ambitious and hopeful for the development of a better understanding between our Association and the State Medical Association. The president of the King County Medical Society (that is the Seattle area) had a similar feeling and through our interesting conversation, I was invited shortly in September 1938 to appear before the State Medical Association Convention. I made a short address using prospective socialized medicine as a main leverage to gain their interest in our political campaign for a better pharmacy law at the approaching session of our State Legislature in January 1939. I had in mind a sincere coöperative effort and incidentally I might report that through the medium of three medical men in the upper and lower house of our Legislature we gained our objectives politically. Incidentally we assisted them very materially in killing subversive legislation. Out of our combined political activities came a better understanding and a consciousness in both Associations of the value of our united efforts. Fortunately Dr. H. E. Rhodhamel, the president of the State Medical Association at that time, was very conscious of the necessity for a united interest and contributed most generously toward the upbuilding of such relations.

"At our Convention in Spokane this year in June, I was assigned the job of liaison officer between our two associations which position is in lieu of an Inter-professional Relations Committee. In August I was invited again by our State Medical Association to

appear before them and I gave a talk which is not reported here.

"For some years there has existed in this state an institution known as the Public Health League. Its ineffectiveness politically has caused its recent abandonment and there is conversation running now relative to the establishment of a united professional group which would incorporate medicine, dentistry, pharmacy and nursing. As yet not sufficient activity has taken place to formulate such a united effort but I am hopeful that it will develop before the next political campaign.

"You may sense from this letter that we value too much our relations with the medical group in terms of political activity at the expense of better true professional relations. On the other hand, our hope in pharmaceutical circles is that through united political activity we can sell the physician on the very definite value of closer relations professionally, as well as politically."

WISCONSIN.—Max Lemberger, Chairman: "The activity in the Wisconsin Pharmaceutical Association during the past two years consisted of inter-relations with the Medical Society, the Dental Society and the pharmacist members of our Association.

"The State Medical Society invited representatives of our Association to attend their House of Delegates meeting where legislative matters were discussed. The officers of the State Medical Society and the officers of our Association discussed mutual and individual legislative problems during the entire legislative session. We also exchanged legislative bulletins with each other.

"Our State Association has had committee meetings with the Medical Association on such matters as over-the-counter sales of barbiturates, the dispensing of medicines by physicians and the problem of voluntary and compulsory sickness insurance.

"The Milwaukee County Pharmacists' Association inaugurated a series of monthly letters to physicians covering such important questions as: restricting the sale of dangerous drugs to a doctor's prescription only and the practice of curbstome prescribing by physicians. This organization has also held a meeting of physicians and pharmacists to build professional good will.

"During the American Dental National Convention held in Milwaukee, our State Association gave the Dental Society the fullest cooperation through publicity in the *Wisconsin Druggist*, our official publication, by furnishing window cards and displays for National Dental Week which was held during the convention, and by furnishing dental prescriptions and information at the pharmacy booth.

"The Milwaukee County Pharmacists' Association cooperated in this venture with our organization. This organization recently held a joint meeting with the dentists at which Dr. M. H. Seevers, Associate Professor of Pharmacology, School of Medicine, University of Wisconsin, spoke on 'Dental Prescribing.'

"We carry in our *Wisconsin Druggist* each month an inter-professional relations column, advising pharmacists that the sale of such potent drugs as sulfanilamide, aminopyrine, cinchophen, neocinchophen and related drugs should be sold only on a physician's prescription. This column carries warnings on the handling of narcotic prescriptions. It also discusses the revisions of the United States Pharmacopoeia and the National Formulary.

"The committee combats unfair public criticism by giving the pharmacists' side to all public articles. It also urges our members that professional windows be installed more frequently."

NEW JERSEY.—Prescott R. Loveland, Managing Editor: "For several years past our Professional

Relations Committee has been working in close cooperation with the Welfare Committee of the Medical Society of New Jersey. In addition, we also have a Joint Committee on Professional Relations which is composed of six physicians, members of the State Medical Society, and seven members of the New Jersey Pharmaceutical Association.

"In October 1938 the Joint Committee published the third edition of the New Jersey Formulary, a 64-page book, with a preface by Dr. Chester I. Ulmer, Chairman, and a two-page therapeutic index, in addition to the general index. The Medical Society sent complimentary copies to each of their 3825 members. A complimentary copy was also mailed to the 1300 members of the Pharmaceutical Association, and a complimentary copy with a letter were mailed to each of the 365 internes in the accredited hospitals in New Jersey.

"The Professional Relations Committee had a very attractive prescription counter built for displaying N. F. and N. J. F. preparations which was exhibited at the convention of the Medical Society at the Ambassador Hotel, Atlantic City, April 1938 and was again at the State convention at Haddon Hall, Atlantic City, June 1939.

"Members of the Professional Relations Committee were in attendance at both these Medical conventions to direct the attention of the visiting physicians to the preparations on display. At the 1939 convention, samples of Elixir Thiamin, a new addition to the Formulary, were presented to all physicians visiting the display. I might mention that the reaction of the physicians to this display was truly remarkable.

"This prescription counter was also displayed at our own Drug Expositions held in connection with our annual conventions at the Ritz-Carlton in June 1938 and again last June.

"In addition to the foregoing, a number of the N. J. F. formulas were published simultaneously in the *Journal of the New Jersey Medical Society* and in the *New Jersey Journal of Pharmacy*.

"Our Professional Relations Committee holds joint meetings with our medical brethren at least twice each year and our committee is entertained at luncheon by the Medical Society at their convention one year; the following year our committee returns the compliment by entertaining the medical members at our annual convention.

"We are contemplating a revision and the addition of a number of formulas to the N. J. F., and early in 1940 we expect to issue the 4th edition of the Formulary."

GEORGIA.—Mr. Z. O. Moore, Secretary: "On January 22nd, the Board of Directors of this Association employed a combination man to represent this organization as 'Field Representative and Detail Man' on U. S. P. and N. F. preparations. From the reports available, I believe this Association is the only organization in the United States now employing a full-time combination man.

"The duties of this representative are: To contact all pharmacists in the State of Georgia, familiarizing them with the U. S. P. and N. F. program previously adopted by this organization and then to contact physicians through their medical associations and other sources, available to the average detail man.

"The associated-minded pharmacists of Georgia are extremely interested in the return of 'OFFICIAL MEDICINE' and we believe our recent action in employing a full-time representative to assist us will prove to be of inestimable value, not only to the druggists of the state but to physicians likewise."

WYOMING.—A committee was appointed at the 1939 Convention but no report has yet been made to the State Association

THE DISTRICT OF COLUMBIA.—A Professional Relations Committee has been set up to promote U. S. P. and N. F. items to the medical and dental professions. The work is in the preliminary stages and it is hoped that it will develop in some such way as Dr. Andrews' program in Maryland.

MONTANA.—The State Board of Pharmacy reports that it has started a program of an ethical nature through the State Department of Public Health and the Montana Medical Association. This is a new avenue of approach and the development in Montana will be watched with interest.

NEW MEXICO.—H. E. Henry, Secretary, regrets to say that at the last convention the matter of a professional relations committee was overlooked and there was no activity along this line during the past year. However, we can look forward with promise to a report from this state next year.

CONNECTICUT.—Mr. John J. Dugan, Chairman of the Scientific Committee: "The Scientific Committee of our Association has planned a long-range program to be carried over a period of the next two or three years.

"During the last few years, one-half of our convention has been devoted entirely to Professional Pharmacy. These programs have included outstanding speakers and capable teachers from our own state as well as from other parts of the country. Also, we have had demonstrations and scientific exhibits which stimulated much interest among the pharmacists. The Connecticut Pharmaceutical and the Connecticut Medical Associations have been exchanging delegates for several years, and the relationship between these groups has developed very cordially.

"This year the Scientific Committee arranged a conference between five of the leading pharmacists and five of the leading prescribing physicians. At this conference, the men exchanged views on the medical and pharmaceutical angles pertaining to public health and to the improvement of services to the sick. Much will be heard of the plan in the future.

"On April 3rd, the State Association is planning a Pharmacy Clinic in order to bring up-to-the-minute information of the pharmaceutical and medical fields to the attention of the practicing men.

"All in all, our scheme for this year has been to see whether or not enough interest was aroused in the pharmacists so that we might extend our work more deeply into the medical and dental fields next year.

"The success of the Scientific Committee has been due to the fact that each of the members is associated with the busiest prescription store in his locality. These men know the field from a very practical point of view; therefore, their enthusiasm and ability to pass on their interest is unlimited."

CALIFORNIA.—The Pharmaceutical Association has no Committee on Professional Relations but sporadic attempts have been made to further the work; officers of the Association have from time to time met with the medical and dental people but no outlined program has been carried out.

MICHIGAN.—The work being done in Wayne County, Michigan (City of Detroit), by the Pharmaceutical Associates is of particular interest.

"The Pharmaceutical Associates of the Wayne County Society are active in working with the Medical Society in their fight to retain the individualized practice of medicine, dentistry and pharmacy through the Medical Dental Bureau system (6 years old). The present mayor is trying to socialize this service.

"Members of our group who are also officers of the Detroit Retail Druggists Association sponsored a

joint meeting of the Medical Society and the D. R. D. A., held February 19th; about 600 attended.

"The Inter-professional Council (4 years old) composed of a representative of medicine, dentistry, veterinary medicine, nursing and pharmacy, Chairman Leonard A. Seltzer, Secretary Roland T. Lakey, has not met this year, mainly due to the unusual amount of activity all of its members have been enlisted in."

KANSAS.—Mrs. C. B. Miller, Executive Secretary: "In Kansas we have one man set up in every county to work with the physician, dentist, doctor, etc., in the county programs. These County Inter-Professional Chairmen work under a State Chairman, who in Kansas is Kelsey Petro of Topeka.

"Am sorry to report that there are only a few counties functioning with regular meetings. However, considerable has been accomplished in these vicinities in these get-togethers. We exchange speakers at our Conventions. For a number of years the Pharmaceutical Association, in Convention, has had a speaker from the Medical Association, and vice versa.

"The State Medical Association Journal carries articles at the suggestion of the Pharmaceutical Association, and our Journal does the same for them. In Kansas the Doctors and Druggists work together very closely in legislative activity."

MINNESOTA.—Charles V. Netz, Secretary: "Mr. H. H. Gregg is the chairman of our so-called "Inter-professional Relationships Committee" which has functioned spasmodically under different heads over a period of ten years.

"Two sets of prescription cards were mailed to all physicians and pharmacists in Minnesota. The first set of 16 cards was followed by a second set of 8 cards. Then the first set of cards was revised. None of this work has been done since 1935.

"During the last six to eight years the committee has regularly done the following: Provided U. S. P. and N. F. exhibits at the annual conventions of the Minnesota Medical Association and Minnesota Dental Society, at the public *Health Show* given each year in the Minneapolis auditorium, and at district meetings of the Ramsey and Hennepin Counties Dental Societies. Four pharmacist-physician evening dinner meetings have been sponsored by the committee at which speakers for both professions 'take their hair down' and blast. Mr. Gregg has addressed the staffs of eleven Twin City hospitals during the past year on phases of professional pharmaceutical work. An 'Interprofessional' half-day program is offered each year at the annual convention of the M. S. Ph. A. at which prominent physicians and dentists cooperate with our own speakers in the discussion of our problems.

"Just at the present the committee has a more ambitious program under way, the success or failure of which will be known within two months. Mr. Gregg will release the details after this trial period."

IDAHO.—J. J. Lynch, Secretary: "On March 26th, we shall hold a joint meeting between Doctors, Druggists and Dentists in Twin Falls. If arrangements develop as anticipated, we shall within the next thirty days hold a similar meeting in Boise.

"The time seems to be psychologically correct for the reason that whenever such meeting is mentioned all seem to be extremely interested. I greatly appreciate the type of work that you have undertaken and the difficulty which you are encountering. However, I feel confident that you will be rewarded with considerable success. I should be pleased to report later activities from Idaho."

NEBRASKA.—R. L. Whaley: "As I happen to be the chairman of that committee, I will give you an outline of the work we have done during the past year. Wherever possible we have furnished speakers at medical and dental meetings in an

endeavor to bring the allied professions closer together.

"In all instances they have been well received and our association has received much credit for the work we are doing from the above groups.

"Last fall this committee took the lead in a campaign which is now being carried on under the George-Deen Act to have speakers meet in different localities with the local pharmacists and this has been enthusiastically received by the pharmacists and I am sure this work is only in its infancy. This work is similar to that being done in Wisconsin."

ILLINOIS.—Joe Shine, Secretary: "We have tried to follow through on the West Virginia Plan of circulating the doctors with 3 x 5 file cards, but don't seem to get any interest among our local associations.

"Our association exhibits annually at the Illinois Medical Association meeting with a general U. S. P. and N. F. display which has been prepared by the National Association of Retail Druggists through the kind cooperation of our good friend and member, Mr. O. U. Sisson. This year it is our desire to have a new type of exhibit which Mr. Sisson is now working on.

"The Illinois Medical Association annually holds a Hall of Health display to the public and also an exclusive display for the profession and our display is usually used as a professional exhibit.

"Frankly, we are still trying to find some workable plan that does not cost a fortune. We are, however, more or less sold on a general trade with the medical society on a page in their journal for a page in our magazine. One will carry the druggists' story to the doctors and the other will carry the doctors' story to the druggists. We have a definite promise for such an arrangement to take effect following the election of officers this year when Dr. Templeton of Pinckneyville will become president of the I. M. A. At that time we feel we can accomplish this general plan."

VIRGINIA.—A. L. I. Winne, Secretary: "At the present time we have not in operation a Professional Relations Committee in our Association such as we have planned for. We do have plans to follow out a card system similar to that in use in Maryland and have made a \$500 appropriation to get the work under way, but we have been delayed more in waiting to get the right kind of committee set-up than by lack of plan or funds to get to work.

"We do have a committee which has been functioning for some four or five years attempting to popularize U. S. P. and N. F. products, and that committee has done good work within the scope of its authority."

FLORIDA.—A. W. Morrison, Secretary: "During the past year there has not been, to my knowledge, any joint meetings of physicians, dentists, pharmacists and nurses but in previous years we have had several.

Our local group invites one of the committees from the Medical Society at each of our monthly meetings and we have worked out a much better feeling with the Medical Society as a whole. At our last meeting, we invited all physicians who were also pharmacists and it was probably the finest meeting that we have ever had of our group."

SOUTH CAROLINA.—W. D. Strother, Chairman: "Our organization in South Carolina is a committee of three, one retail pharmacist and two members of our pharmacy school faculty. Realizing the great need for this type of work, I approached certain influential pharmacists and tried to get some action through the state association. This attempt having failed, I arranged conferences with the President of the university, the Dean of Administration and the Director of our Extension Division. As a result of these conferences a plan was approved to be sub-

mitted to the officers of the State Pharmaceutical Association, the Dean of the Medical College, and to the local medical society here in Columbia. All these organized groups approved our idea and plan. With their endorsement the enclosed letter dated April 8, 1938, with a self-addressed card were mailed to every drug store and doctor in the state. About 36 per cent of the physicians and 40 per cent of the drug stores replied, all in the affirmative. Our mailing list now numbers approximately 950.

"The Maryland prescription box idea was presented to the druggists of the state early this year and about four hundred of these boxes have been sold. Much interest has been aroused and we believe much good has been done. We have found that it is more difficult to get pharmacists to cooperate than physicians.

"While we are making plans to continue our regular letters, another more intensive program is being worked out here in Columbia. The thought occurred to me, that small organized groups would have to get together and all pull the same way. In casting about it seemed to me the medical staffs of hospitals would be logical groups. I explained to the superintendent of a local hospital my objectives and how they would benefit the hospital and its patients. My plan was approved and in due course I received an invitation to read a paper at a staff meeting on 'How Physicians Can Help Hospitals.' At the conclusion of this meeting two physicians and I were appointed by the chief of staff to study ways and means of reducing the cost of drugs.

Most of these efforts have been to show physicians how to write prescriptions for official drugs in place of more expensive proprietaries. The whole staff of some eighty doctors has enthusiastically adopted the plan. From the beginning I have tried to make it clear that physicians must use the information given them in writing prescriptions for their patients outside of the hospital. All preparations approved at these hospital staff meetings are immediately sent by the Extension Division to every drug store in the city, and to druggists and physicians over the state. Physicians are so pleased with the hospital plan that they are planning to extend the unit to all the hospitals and all the physicians in the county. I know our plan is working in Columbia and would work in any town with proper directing."

Professor Strother sent a copy of the 7-page letter which goes very thoroughly into the whole question of physician-pharmacist relationship and the benefit that the patient will derive from cooperation between the two and a copy of a bulletin that was sent to the physicians which emphasizes the advantage of using U. S. P. and N. F. products. The Extension Division of the University of South Carolina sent out a bulletin giving the proprietary name of about fifty products and cost of same, and in juxtaposition to this the U. S. P. name of the same product and the cost of the U. S. P. article.

These reports have also been given to illustrate the different methods that are used in attacking the problem of better relationships between the health professions. Your Chairman has been greatly surprised at the extent of the activities and also at the different ways in which these committees function. If these reports are not read by the chairmen of the various committees, the expense of printing them will be wasted and their purpose lost.

In closing this third report, your Chairman offers any assistance that he can give to any state committee in working out its problems.

National Pharmacy Stamp Drive

Million Names Sought to Petition

The Nation's pharmacists are definitely and decidedly backing the campaign for a National Pharmacy Stamp. Over 60,000 signed their names to a special petition addressed to the postal authorities. Their comments expressed an enthusiasm for the project and their earnest desire to coöperate.

The AMERICAN PHARMACEUTICAL ASSOCIATION and the National Association of Retail Druggists unanimously passed resolutions during their 1934 and 1939 meetings recommending that the Post Office issue a Pharmacy Stamp. The Utah, Wisconsin, Texas and other state associations adopted strong resolutions in its favor. College of pharmacy educators, their students, drug wholesalers, noted stamp collectors and dealers have coöperated. The following is quoted from an article which recently appeared in the highly popular philately magazine, *Stamps*: "A campaign (Pharmacy Stamp) has been gaining such momentum that the Post Office must necessarily give it some serious consideration. . . . Few of our readers will fail to be asked to sign a petition and consequently it will not be a great surprise if a Pharmacy Stamp is eventually included in the program for 1940." The Committee for a National Pharmacy Stamp feels that Pharmacy Week of this year, October 20th to 26th, would be an appropriate time.

Postmaster General James A. Farley some months back wrote that "While no decision can be made this far in advance with regard to the stamps to be included in our commemorative stamp program for 1940, I can assure you that your suggestion with respect to a Pharmacy Stamp will be given our very best consideration."

National Pharmacy Stamp Week

With the whole pharmaceutical profession and industry solidly behind the achievement of a National Pharmacy Stamp, the week of April 21st through 27th was designated as National Pharmacy Stamp Week. Every one of the nation's retail

pharmacists received a petition which urged the Post Office Department to award this honor to a profession which offers such a vital public health service. The enthusiasm with which pharmacists went about getting their friends and customers to sign this petition bespeaks their support of this movement. There was no holding back, no procrastination. They rolled up their sleeves, pitched in and obtained signatures, hundreds upon hundreds of thousands of them. While the total is not known at this time, the number will be sufficient to impress upon Post Office authorities that the public considers the profession of Pharmacy worthy of recognition through a National Pharmacy Stamp.

This special drive was based on the enthusiasm shown by the many pharmacists who had been following this campaign. A Committee for a National Pharmacy Stamp was as a central directing force. Dr. Robert L. Swain, noted editor and columnist of *Drug Topics*, Dr. J. Leon Lascoff, famous pharmacist and writer, and George L. Genz, Sales Manager of Parke, Davis & Co., were selected as co-chairmen. Other noted men and women of Pharmacy and secretaries of state associations grace the Committee roster.

The laity petition, signed by what may total over a million drug store customers, reads:

"FOR REASON that pharmacy is a health profession of major importance, serving the public in every town and city throughout the nation as the compounder and dispenser of physicians' prescriptions, the custodian and dispenser of narcotics and other potent drugs necessary for the treatment of disease; and

"FOR REASON that this service is rendered as a matter of professional duty for an average of fifteen hours a day throughout every day of the year; and

"FOR REASON that pharmacists, in co-operation with physicians and other medical scientists, in order to assure dependable

therapeutic agents, have, at regular intervals issued the United States Pharmacopœia in which are set up high and exacting standards for drugs and medicines, and which have been adopted as public standards through Acts of Congress and the legislatures of each of the forty-eight states; and for reason that a new revision of this authoritative work was begun in 1940.

"We, the Undersigned, respectfully request the United States Post Office Department

to design and issue A NATIONAL PHARMACY STAMP in Recognition of the Public Health Significance of the Profession of Pharmacy."

The following statement was used as a footnote: "Pharmacists throughout the land sell across their counters each year a minimum of one hundred million postage stamps as a community service and Government coöperation."

St. Louis Hospital Pharmacists Organize

The pharmacists in St. Louis Hospitals met Wednesday, March 13th, at the City Sanitarium in order to elect officers, appoint committees and to begin their formal organization. Twelve representatives were present from hospitals of St. Louis and surrounding territory.

The new organization will be known as the "Hospital Pharmacists Association of Greater St. Louis." The objectives of the new organization are: (1) to improve hospital pharmacies, (2) to study business methods, (3) to raise standards, (4) to provide scientific presentations.

The officers elected were: Mr. Oliver J. Steppig, Alexian Brothers Hospital, *President*; Mr. B. T. Osborne, St. Louis County Hospital, Clayton, *Vice-President*; Mr. A. L. Kroupa, Barnes Hospital, *Secretary*; and Mr. C. W. Lieder, City Sanitarium, *Treasurer*.

The hospitals represented were: Alexian Brothers Hospital, Barnes Hospital, Christian Hospital, City Hospital, Jewish Hospital, Lutheran Hospital, Missouri Baptist Hospital, Missouri Pacific Hospital, City Infirmary, City Sanitarium, Isolation Hospital, Robert Koch Hospital, St. Louis County Hospital, St. Luke's Hospital.

Monthly meetings are planned for the second Tuesday of each month, the next meeting to be held at Barnes Hospital, April 9th.

Resolution of the Houston, Texas, Retail Druggists Association

"Now, Therefore, Be It Resolved, that the Houston Retail Druggists Association urges all its members to assist the health and welfare forces in the community in the conquest of syphilis and gonorrhea by making the following seven principal contributions: *First*, don't diagnose; *second*, don't prescribe; *third*, refer patients to physicians; *fourth*, don't sell 'patent remedies' for the self-treatment of venereal diseases; *fifth*, don't sell defective prophylactics; *sixth*, distribute informational literature obtainable from health departments concerning syphilis and gonorrhea; and, *seventh*, for the pharmaceutical society to give valued help as a body of professional men."

Conference of Professional Pharmacists

Following the Session of this Conference at the Atlanta Meeting, Chairman C. B. Jordan appointed a Committee on Organization with the following membership: Chairman, Max N. Lemberger, Milwaukee, Wis.; Charles V. Selby, Clarksburg, W. Va.; J. K. Attwood, Jacksonville, Fla.; Fred D. Lascoff, New York City; Paul G. Stodghill, Denver, Colo.; Ambrose Hunsberger, Philadelphia, Pa.; L. D. Bracken, Seattle, Wash.; and Herbert H. Gerding, Ft. Wayne, Ind.

This Committee met at the Hotel Morrison, Chicago, Ill., on Monday, April 15th, to consider a plan of organization which would embrace or include the various organizations of professional pharmacists now functioning in various sections of the country. The Committee will submit its report during the Sessions of the Conference of Professional Pharmacists at the Richmond Meeting of the A. Ph. A. and it is expected that the report will be an important feature of the meeting.

Information Regarding Appointment of Interns in Pharmacy at The New York Hospital

The New York Hospital, situated at 68th Street and York Avenue, is a general hospital with 1057 beds and an out-patient service that averages about a thousand visits daily.

The Hospital Pharmacy has been developed to meet the needs of an institution of this size, and its facilities are now available for the training of graduates of recognized colleges of pharmacy who have a degree of Bachelor of Science in Pharmacy and who wish to specialize in the hospital field.

On July 1, 1940, two interns in Pharmacy will be appointed for a period of one year. They will devote full-time to their duties and will receive intensive and carefully supervised training in all branches of hospital pharmacy. Full maintenance will be provided.

Application blanks may be obtained from George W. Wheeler, M.D., *Superintendent*, The New York Hospital, 525 East 68th Street, New York City

Pharmacy's Economic Service*

By John N. McDonnell†

Regardless of whether we like it or not, some sort of "Socialized Medical Care" will come in the future. This also means "Socialized Pharmacy." This seems inevitable, in spite of political purpose, administration change or professional resistance. The problem of such "socialization" and the influence it may have upon the profession of pharmacy is of prime importance.

It is the purpose of this paper to determine wherein the retail pharmacist will fit in this picture of socialized health practice. What reasons may he given for his inclusion in such programs? What defense may he set up to insure consideration of retail professional practice by those in whose hands will be placed the evaluation of the agencies to be chosen for public medical care?

The pharmacist (and the pharmaceutical manufacturer) may well pause and wonder where he will fit into the schemes which have been proposed by bureaucrats, radicals, middle-of-the-roads and conservatives.

No one denies that some provision should be made for the poor and indigent. Too many people cannot afford the present high cost of medical service. Up to this time, we have heard no complaint concerning pharmacy's cost of service. The Report of the Committee on the Cost of Medical Care had nothing but acclaim for pharmacy. Yet the proposal for a national health insurance plan, as outlined at the conference in Washington recently, is another thing entirely, for it would embrace all classes, including those with the ability to pay for care. The merit of the latter proposal is debatable, but there cannot be denial of the vital need for health care of the destitute and the under-privileged. That something must be done is obvious, and the dissension hinges solely on the question of "how much shall be done." Nevertheless, it was enlightening to note the governmental proposals of Miss Josephine Roche, *et al.*, concerning specific details of the proposals. The mere fact that pharmacy was not mentioned leads one to believe, not that all is well, but that pharmacy will be ignored in such programs, and relegated to a subordinate and menial position.

Medicine is vitally concerned with such programs. Unfortunately, it has adopted an unconciliatory attitude, and until but recently has held to the *status quo*. It is dangerous to attempt to thwart change, and the stand of organized medicine seems to presage an oversurge of public demand for the uttermost in regulated health. The recent mo-

nopoly indictment of medicine by federal authorities¹ and the campaign through the national and state legislatures for a health program, indicate that the battle will be a vicious one.

As pharmacists, we are able to see merit in either side. There is need for revision of standing methods of health care, but no need for a national socialized health program for all. And, though medicine has led the attack, it behooves pharmacy to look out for itself.

In the past, pharmacy has been frequently "sold out" in the hargaining process. Witness the medical insistence for professional privilege in the hospital insurance plans and in relief care in the several states. We might well suggest that medicine and pharmacy cooperate in formulating a definite comprehensive plan, equitable to all of the professions, satisfactory in its service to recognized needs, yet avoiding the pitfalls of socialization. Without a plan, we are but carping, criticizing reactionaries. Perhaps if the obvious need were recognized, and the logical solution found (even if it differed in many phases from that of the social-minded Public Health workers who are promoting the National Health Plan) the public at large might view the professions in a somewhat better light than at present.

Each day finds the situation growing more acute, as legislative mills are grinding and the public becoming increasingly conscious of the battle between the reactionary forces of organized medicine on one hand, and the radical Social Service bureaucrats on the other. We should find, in the coming months, considerable amazement at what may be proposed to entice the average citizen to intensify or modify his political allegiance. With one group advocating greater deference to the needs of the woe-begone "One Third of the Nation," and the other reversing all previous stands to embrace the salvation of the aged through spectacular panaceas, there is no doubt but that health will come into the picture, and competition to present enlarged scope will be the word.

As yet, the profession of pharmacy has been non-committal. Closer as we are to the average citizen—his confidante in times of stress and misfortune—we pharmacists are perhaps more acutely aware of the need for adequate health care for the marginal group of the citizenry who find themselves at present unable to obtain sufficient medical care. True it is that for the destitute, provision is made in "Relief Care." That need is granted. Unfor-

* Read before the Section on Pharmaceutical Economics, A. Ph. A., Atlanta meeting, 1939.

† Assistant Professor in Pharmacy, Philadelphia College of Pharmacy and Science; Editor, *American Professional Pharmacist*; practicing prescription pharmacist in Pennsylvania.

¹ The original indictment of the A. M. A., several officers thereof, and certain County Medical Societies in the District of Columbia, Texas, etc., under the strictures of the Sherman "Anti-Trust" Act, because of alleged restraint of "Trade" against such "cooperative" or "welfare" organizations, was discharged late in the last reversed by the action in March (D. C.) Circuit Court of Appeals.

tunately, a study of the income levels of the nation's people reveals that a tremendous number of families, above the indigent class but in the low-income group, find the demands of emergency surgical, medical and hospital care too great a demand upon their resources.

Insurance hospitalization has been propounded as a solution, and is gaining affiliates rapidly, as the institutions foresee relief from the strictures of their own financial worry. This program has received medicine's left-handed approval, after provision had been made for adequate medical fees outside the insurance cost-coverage. Such a program bodes no good for the private practice of pharmacy. Within the set-up of the insurance plan the dispensing of drugs is free. As very nearly all of the hospitals of the nation depend upon local, state or federal financial grants, and in great part upon the charity of the community, it seems paradoxical that the pharmacists should see their own professional practice usurped, and be taxed and caged to support the deed.

National Health Program

A national health program, of insured medical care for either the low-income group or for everyone, finds four possible methods for the dispensing of drugs and medicines:

1. Governmentally established, operated and supported clinics and pharmacies.
2. Designated hospitals as dispensing centers, remunerated directly by the Government.
3. Selected geographically centered independent pharmacies, or the assembly of "panels" of prescription pharmacies from which the patient may select his choice and where drugs may be dispensed with the pharmacist to be remunerated by the Government.
4. Free choice of any pharmacy by the patient, with remuneration of the pharmacist by the Government.

The first alternative seems purely communistic in nature; the second somewhat socialistic; and both certainly indicate the destruction and elimination of the retail pharmacist. When interpreted in terms of political science and economics, they appear incompatible with the democratic process.

The third alternative has gained strikingly successful results in Great Britain, bringing to the pharmacist a tremendously increased practice even if at slightly lower professional fees than is customary. In all of the furor over the "panel" system, no one seems to have considered the pharmacist. It has been stated by many British pharmacists that this system has resulted in the salvation of pharmaceutical practice.

The fourth plan represents an increase in the present relief set-up and method of distribution, apparently proved workable and impartial. All other proposals are modifications or combinations of these. This entire problem, as far as trends, pres-

ent status and indications, has been most adequately dealt with by others.^{2,3}

The Community's Friend

That with which we are concerned in this paper is an evaluation of the services that the professional prescription pharmacist renders to his community. No hospital, dispensary, welfare or health center or social service worker can take the place in the community that is now held by the retail pharmacist. When his manifold duties and services are properly considered, there can be no doubt but that those who ultimately determine the scope and operation of socialization procedure will include the retail prescription pharmacist as a vital and integral part of the system.

Few laymen, and not many more in the profession, recognize that the pharmacist has a twofold duty in the proper practice of pharmacy. Although the chief function of the pharmacist, that phase of his practice that has been handed down to him through the centuries, has been to supply drugs and medications to the public for the cure of disease, there is a secondary service required of him. This may be best expressed as "the duty to impart information regarding the preservation and betterment of the public health."

"The pharmacist is the community information bureau in matters pertaining to the above. He is closer to the layman than the medical, theological and law professions. Laymen know the pharmacist best; they trust him and they believe in him. They feel free to place their confidence in him, for they feel that they understand him, and he, them." The above words are still true. And such is rendered to the community without thought of charge, and with no thought of reward.

From our experiences with social service, industrial medicine and governmentally controlled service in many lines of endeavor, we may be sure that never will a public employee render the open-minded, unselfish, self-sacrificing service that is every day dispensed in city and hamlet by the nation's pharmacists. It is impossible, apparently, for municipal and other governmental agencies to avoid callousness in handling the public. We believe that such would be the case with pharmaceutical practice under the same conditions.

Much has been said in the past regarding the many phases of diversified activity that make up the proper conduct of prescription pharmacy practice. Service to the physician, better comprehended as a means of greater cooperation between the professions, includes far more than is included within the scope of prescription compounding alone. Service to the community, inextricably bound up

² Kelly, E. F., "The Socialization of Pharmacy," *Amer. Prof. Pharm.*, 5 (March 1939), 133; 5, (April 1939), 191.

³ Winn, A. L. I., "Retail Pharmacy's Attitude toward Socialized Medicine," *Ibid.*, 5 (April 1939), 193.

with the pharmacist's service to the medical profession, finds its outlet in efforts on behalf of the public health and welfare, and in a large measure fails to bring monetary returns to the dispenser. With socialization, such a situation is incredible.

With the rapid development of preventive medicine, as a result of the discoveries in the field of the microorganisms and immunity, there has arisen a greater appreciation of the important place pharmacy holds in the public health field. Preventive measures are not a recent innovation, for since the dawn of civilization, wherever people have gathered, there strict regulation has been propounded for the protection of the general welfare. During the past years, as science discovered ways and means whereby bacterial infections might be combated, medicine has fought the battle and pharmacy has supplied the weapons. Now the pharmacist is called upon as never before to aid in the alleviation or eradication of all diseases, contagious or otherwise, serious or simple, wherever they may appear, and to provide against their recurrence.

As an evidence of the pharmacist's service to the community in this regard, we may cite the recently launched campaign against venereal diseases. The pharmacist holds a place in the public health control of these diseases, for they are the most difficult to bring to light and the hardest to trace to extermination. By consulting the corner druggist, the public makes its first tentative attempts to begin medical treatment. The average citizen feels more at ease discussing such misfortunes with the druggist. In the latter's hands is placed an awful responsibility, for the control of syphilis, gonorrhea and related diseases depends chiefly upon early diagnosis and continued treatment. Surveys have shown that the great majority of laymen, when questioned as to the logical and first thought for treatment, would turn to the pharmacist with whom they were acquainted. The public does not yet, and probably will not for time to come, feel free to consult clinics or hospitals for first attempts at treatment. Pharmacists in the main stress to the laymen the importance of immediate medical treatment, and refer the patient to the nearest physician. The patient is often prone to consider a few doses of an anti-syphilitic sufficient and with the diminution or disappearance of surface symptoms, returns to his normal routine. The pharmacist can do no better service to the commonweal than to insist upon prolonged treatment. Only he is able to do this, through his neighborly contact with the citizenry.

Along with the subject of preventive medicine and immunization are the biological products. The handling of these products has been a very definite responsibility of the pharmacist, and the United States Government has seen fit to entrust the preservation, storage and dispensing of such material to our profession.

Aside from the problems of preventive medicine, the pharmacy exists in the community for the purpose of providing to the public those articles which are required for the treatment of the sick. The key-note of pharmacy is "service" and the community has come to expect from the retail prescriptionist not only instruction as to the use of appliances and instruments obtained from him but also pertinent advice as to the best particular type of instrument or medicament adapted for the purpose for which it is intended.

This logically includes not merely drugs but also that information necessary for the public's intelligent use of these drugs. The retail pharmacist supplies the various apparatuses which are used for the application of drugs or other remedial agencies, such as heat or cold; the various instruments and utensils which are used in the sickroom; and the facts relative to the prevention of the spread of disease to others not previously infected. Together with the foregoing, the pharmacist continually disseminates necessary information relative to the needs of the communities' babies and the expectant and nursing mothers; service to the diabetic patients; vitamins and vitamin products; infants' and invalids' foods; the public laboratory services in assistance to the allied professions, public health examinations, commercial testing and examination of foods and other products, service in emergencies and to the home medicine chest; the allied legitimate products such as trusses and orthopedic aids; spices and food flavors; and cosmetics and non-allergic preparations; and the information services which cover the library and literature for the allied professions and the public; and the proprietary medicines and their intelligent distribution, and community health and personal care.

The pharmacist holds a place in so assisting the efficacy of medical care, that never can be replaced by public agencies. By rendering such a service to the public and the professions, the retail pharmacist is accomplishing work that can never be done by any amount of public health propaganda or civic educational measures. This paper is intended to focus the attention of pharmacists upon their present place and the opportunities for greater possible service, and this writer feels sure that if the pharmacists emphasize more fully to the public and to government the recognizable value of these phases, there can be no doubt but that retail prescription pharmacy will be given an important place in the Socialized Medical Care programs to come. Much of pharmacy's illness may be attributed to such a lack of appreciation by the allied professions, by government and by the public, and even by pharmacists themselves. A greater emphasis on pharmacy's community services is indicated, and then the future need hold no terrors for our profession.

Ninth Annual Pharmaceutical Conference

The Ninth Annual Pharmaceutical Conference, sponsored by the College of Pharmacy of the University of Michigan, will be held in the amphitheater of the Horace H. Rackham School of Graduate Studies on the afternoon of May 21st. The evening session will be devoted to the customary joint meeting of the Michigan Branch, A. Ph. A., with the College of Pharmacy. An unusually interesting and instructive program has been planned and a cordial invitation to attend is extended to the members of all branches of pharmacy.

The guest speaker will be Dr. B. V. Christensen, dean of the College of Pharmacy of Ohio State University. The topic which he has chosen to present is, "Recruiting for the Profession of Pharmacy." As an educator Dr. Christensen has a keen insight into the problems that confront pharmacy to-day, and his address will deal with methods which he feels are important in regard to selecting students for admission into the ranks of pharmacy.

The second speaker of the afternoon will be Mr. Arthur Secord of The Extension Service and the Department of Speech of the University of Michigan. His topic will be, "Developing an Effective Personality." Mr. Secord is an accomplished speaker and one who should be able to give us an excellent discussion concerning the personal factors that tend to bring success in the practice of pharmacy.

The third speaker of the afternoon will be Dr. Arthur C. Curtis of the Department of Internal Medicine of the University. Those who attended the Conference two years ago will recall Doctor Curtis' discussion of sulfanilamide. In response to several requests, we have asked Doctor Curtis to appear before the group again this year, and to discuss another of the newer treatments for one of the common diseases, a type of treatment in which pharmacists have a particular interest, that of "Sulfapyridine and Anti-sera in the Treatment of Lobar Pneumonia."

After the usual dinner the evening meeting will be preceded by the business session and annual election of officers of the Michigan Branch. We feel that we have been unusually fortunate in being able to secure as the speaker of the evening, Dr. Bradley M. Patten, Professor of Anatomy and Chairman of the Department of Anatomy of the University. For a number of years, Dr. Patten has been working on the development of a technique whereby moving pictures of embryonic development could be made possible. His pictures have been shown extensively and have always provoked marked interest. Dr. Patten will exhibit and discuss "Micro-moving Pictures of Living Embryos at Various Stages of Their Development."

Among those receiving honorary degrees at Founders' Day exercises of the Philadelphia College of Pharmacy and Science recently was Dr. Paul S. Pittenger, vice-president of Sharp & Dohme, Inc.

Appendicitis Warning Card

The New Jersey Pharmaceutical Association has recently sent out to the pharmacists of the state, poster, on cardboard, which reads as follows: "Help reduce the death rate from appendicitis in New Jersey by observing the following warning. In the presence of abdominal pain, never give a laxative or physic. Give nothing by mouth. Call your family doctor. Abdominal pain, cramps or soreness which last for four hours are usually serious and may be appendicitis."

The poster was accompanied by the following letter, signed by Prescott R. Loveland, Secretary, from which the following is quoted:

"In cooperation with the Medical Society of New Jersey, we are sending you herewith a new poster warning the public of the danger of giving a laxative or physic in the presence of abdominal pain.

"The Medical Society is giving the pharmacists of New Jersey very helpful cooperation in supporting matters of interest to our profession and this cooperation is bound to engender fraternal feeling and strengthen the bonds of friendship between physicians and pharmacists.

"We would respectfully suggest that, if possible, you put this poster in a frame, or display it in your pharmacy in some other prominent way to let the physicians in your vicinity know that you are cooperating with the Medical Society. Whenever a physician visits your store, call his attention to the fact that you are displaying the appendicitis warning card. We are quite sure you will agree with us that in so doing, we will impress our Medical brethren with our earnest desire to comply with any reasonable request in behalf of the public health and welfare."

Thirty-Fifth Anniversary Manila College of Pharmacy and Dentistry

The 35th anniversary of the founding of the Manila College of Pharmacy and Dentistry was fittingly observed in December 1939. The celebration was sponsored by the Student Council.

Dr. Alfredo L. Guerrero, President of the College, was guest speaker at the radio broadcast which included also greetings from the alumni of different nationalities; Miss Belen Cristobal, President of the Student Council of the M. C. P. D., spoke at the radio program on behalf of the student body. She was the chairman of the executive committee and was ably aided by different sub-committees. Dr. Marina Santamaria, Adviser of the Student Council, helped in the successful celebration of this anniversary.

Dr. A. G. DuMez, President of the AMERICAN PHARMACEUTICAL ASSOCIATION, was formerly head of the College of Pharmacy in Manila.

Prof. Abraham Taub has been elected a Fellow of the American Institute of Chemists

Medical Assistance in Pennsylvania

When the present medical assistance program was launched on September 15, 1938, it included the services of physicians (allopathic, homeopathic, and osteopathic), dentists and pharmacists. Nursing service was added in November 1938 and clinical service in February 1939.

Between September 1938 and March 1939 there was a rapid rise in the volume of medical service rendered; but this rise was primarily the result of the fact that the program was still getting under way and only secondarily the result of the normal seasonal increase in the volume of illness during the fall and winter months.

Of every dollar spent for medical assistance during June 1939 (the latest month for which figures are available from all counties) 66 cents was paid to physicians, 8 cents to dentists, 15 cents to pharmacists, 3 cents to nurses or nursing associations and 8 cents to clinics.

Month 1938	Allocation	Total	Pharmacists
September	\$ 58,925	\$ 16,120	\$ 689
October	117,845	83,213	6,139
November	111,625	97,154	8,932
December	112,845	108,318	11,180
1939			
January	\$127,160	\$125,021	\$15,452
February	141,640	140,894	33,542
March	193,295	191,799	39,731
April	187,760	184,329	32,723
May	188,875	182,824	33,204
June	181,785	176,178	26,188
July	184,350	182,800	26,200
August	202,445	199,400	30,600
September	204,395	203,000	34,000
October	197,330	196,000	35,500
November	172,920	171,000	32,000

The best index of the volume of medical service rendered in accordance with the rules of the program is the amount of bills after review and approval by County Healing Arts Assistance Committees and is the number of patients who receive service under the program.

	Persons on Assistance Rolls	Persons Receiving Medical Service Total	Total Amount	Average Amount per Person
March	968,905	75,604	\$289,614	\$0.30
April	940,211	64,574	242,318	0.26
May	935,523	63,629	233,887	0.25
June	904,162	62,646	206,611	0.23
July	945,289	61,100	206,200	0.22
August	1,022,811	70,100	232,900	0.23
September	1,020,273	73,400	229,500	0.23
October	953,911	69,000	227,200	0.24
November	833,295	62,200	209,000	0.25

Reduction in Bills by County Committees

Control over excessive service is exercised by local professional committees which review bills and eliminate charges for any service which is considered unnecessary or excessive. The reductions made as a result of these eliminated charges should not be

confused with the pro-rata reductions or prorations which are applied, if necessary, to approved bills in order to bring them within the monthly allocation.

The greatest percentage of reduction was applied to physicians' bills, but even these were reduced by only nine per cent. Pharmaceutical bills were reduced by four per cent, dental and clinical bills by two per cent, and nursing bills by one per cent.

Proration of Bills

Approved bills for participants other than pharmacists are prorated, if necessary, by County Healing Arts Assistance Committees in order to keep them within the monthly allocation which is made to each county. No proration is applied to pharmaceutical bills since they represent charges for materials as well as for services, but if the available balance of the allocation after deducting the full amount of approved pharmaceutical bills is not sufficient to cover the amount of approved bills for other participants, the latter bills are reduced on a prorata basis in order to bring them within the monthly allocation.

Month 1938	Pharmacies Participating Number (5)	Per Cent (6)
September	290	7.0%
October	1176	28.3
November	1437	34.5
December	1467	35.3
1939		
January	1669	40.1
February	2094	50.3
March	2191	52.7
April	2083	50.1
May	2064	49.6
June	1909	45.9
July	1907	46.0
August	2000	48.0
September	2300	55.0
October	2000	48.0
November	1900	46.0

For some months, notably August, invoices from an appreciable number of counties were paid within two months. In a few cases, however, payment of all invoices was not made until five or six months after the month in which the invoice was dated.

The most serious delays were accounted for primarily by the time required for review of invoices by local professional committees and handling of invoices by county assistance offices.

Seasonal Allocations

Experience with the present method of allocation indicates that because of seasonal variation in the incidence of illness the extent of proration of approved bills in the state as a whole fluctuates violently from month to month.

On the basis of the seasonal variation in illness shown in a study, "The Incidence of Illness and the Receipt and Cost of Medical Care," by Falk, Klem and Sinai, the following allocation rate has been

calculated for each month which will average twenty cents per person on the assistance rolls per month for the year.

January.....	\$0.27
February.....	0.26
March.....	0.25
April.....	0.21
May.....	0.18

June.....	0.16
July.....	0.16
August.....	0.16
September.....	0.17
October.....	0.17
November.....	0.18
December.....	0.23

—The Pennsylvania Pharmacist

National Dental Program

G. C. Schicks, Chairman

* The buzz of the dental drill or the puncture of the hypodermic needle brings fear to many dental patients, yet the pain caused by the use of either can be largely overcome. Many people who come into the drug store think that all dental treatment is painful. This is not so. A large part of dental treatment does not involve pain, and particularly is this so when the patient has periodic check-ups made. The pharmacist can do much to relieve apprehension about a visit to the dentist.

Points of Special Interest about Prescriptions

Surface anesthesia prevents pain from insertion of the hypodermic needle. The formula for topical anesthesia presented is about as efficient as any preparation for such on the market. In addition, it is antiseptic; therefore, no other antiseptic is required to clean the surface before injection.

In dry sockets the blood clot which should fill the cavity after an extraction does not remain. It is sometimes necessary to freshen the surface (cause it to bleed) and pack the cavity to relieve pain as an aid in keeping the clot in place. Dental Anodyne Paste is used for this purpose.

The acetylsalicylic acid in Dental Anodyne Paste should be in fine powder before it is incorporated. If not, the crystal structure of this substance cannot be reduced to a fine state later, thus making a coarse paste which should not be dispensed. This paste is not stable. It keeps well for about six months to a year. When decomposed, the salicylic acid will appear in long, fine needles which are readily recognized and the paste should not be used. If the odor of acetic and salicylic acids is present without the

crystal formation many dentists say it is as effective as before.

The advantage of the guaiacol-benzocaine formula is that it is stable. It is less pleasant to the taste, however.

Hypnotics

When necessary, the patient may be given the refreshment of sleep if it does not come naturally. Barbitol is useful to induce and to maintain sleep over a period of hours. If pain is present, $1\frac{1}{2}$ to 3 grains of the coal-tar analgesics may be combined with it. Sodium Pentobarbital, or Nembutal, is official in the Second Supplement of the U. S. P. It is short acting, produces deep sleep and gives prolonged sedation. Phenobarbital, in addition to its hypnotic properties, acts on the motor areas producing sedation, thus making the jittery patient easier for the dentist to work on. Carbromal acts like the bromides. It works promptly, producing a dreamless sleep. It is not habit-forming as are the barbiturates. Paraldehyde also acts quickly and is considered an efficient hypnotic. If paraldehyde is administered in fruit juice the disagreeable taste is largely overcome.

Prescriptions—Series III

(a)	Metric	Apoth.
R	Approx.	Equivalents
Paraldehydi U. S. P.	1.0 cc.	m xv
*Ft. caps. dura d.t.d. No. X		
Sig: Two with a glass of water $\frac{1}{2}$ hour before retiring.		

Note: One of the safest of hypnotics—rapid acting.

Disadvantage—taste not pleasant.

Capsule disguises it.

Does not relieve pain.

Maximum dose—single 75 minims—daily 150 minims.

Average dose—30 minims or 2 cc.

Sedative 15-30 ms. Sleep 30-60 ms.

*Caps. dura = hard gelatin capsules. Dentur tales doses (d.t.d.) = give of such doses.

Metric Apoth.
Approx. Equivalents

Carbromali U. S. P. 0.5 Gm. gr. viii

*Ft. caps. dentur tales doses No. X

Sig: One with a glass of water for sleep at bedtime.

Note: Average dose 8 grains.

Maximum dose 15 grains.

Efficient, prompt sedative, producing sleep where a powerful hypnotic is not desired.

Useful in mental excitement, restlessness, anxiety.

*Dentur tales doses (d.t.d.) = give of such doses.

Metric Apoth.
Approx. Equivalents

Tab. Barbitali 0.3 Gm. gr. v

*Dentur tales doses No. X

Sig: One with a glass of hot milk half hour before sleep.

Note: Hypnotic where prolonged action is desired.

Average dose 0.3 Gm. = 5 gr.

Maximum dose 1 Gm. = 15 gr. Larger doses usually not advisable.

Sedative 0.1 to 0.12 Gm. ($1\frac{1}{4}$ to 2 gr.) each dose.

Preoperative and postoperative medication.

May be prescribed as Elixir Barbitali N. F. Dose $\bar{5}$ i (4 cc.) giving 2 grains of barbitali in each dose. Proprietary name—Veronal.

*Means—give of such doses.

(d) Metric Apoth.
R_x Approx. Equivalents

Tab. Phenobarbitali 0.03 Gm. gr. ss

*Dentur tales doses No. VI

Sig: Take one tablet the night previous to appointment and repeat one-half hour before office visit.

Note: Hypnotic and analgesic.

Average dose 0.03 Gm. = $\frac{1}{2}$ gr.

Maximum dose 0.60 Gm. = 10 gr.

Sedative 0.015 to 0.2 Gm. ($\frac{1}{4}$ to 3 gr.). Preoperative and postoperative medication.

May be prescribed as Elixir Phenobarbitali N. F. Dose $\bar{5}$ i (4 cc.). $\frac{1}{2}$ gr. phenobarbitali in each dose.

Proprietary name—Luminal.

May be administered at office. Wait $\frac{1}{2}$ hour before giving treatment.

*Means—give of such doses.

ss (semisis) = one-half.

(e)

R_x

Pentobarbitali Solubilis

U. S. P.

*Ft. caps. No. VI

Sig: One with one-half glass water at bedtime for sleep.

Note: Preoperative sedative, prolonged action. Short acting but profound hypnotic.

Hypnotic $1\frac{1}{2}$ grains.

Sedative $\frac{1}{2}$ grain.

Pre-anesthetic $1\frac{1}{2}$ -3 grains before operation.

Allays fear and nervousness.

*Each dose contains 0.1 Gm. ($1\frac{1}{2}$ gr.) pentobarbital sodium or soluble pentobarbital.

Proprietary name—Nembutal.

(f)

R_x

Eugenol

Peruvian Balsam

Acetylsalicylic Acid (fine)

White Wax

Wool Fat q.s. ad

Dentists use for painful tooth sockets (dry sockets).

Note: Dental Anodyne Paste.

Eugenol and Acetylsalicylic Acid are antiseptics and anodynes.

Consistency may be controlled by the quantity of white wax used.

May be obtained by prescribing Pasta Acidi Acetylsalicylici Composita N. F. VI.

Metric Apoth.
Approx. Equivalents

1.2 cc. m. xviiss

6.0 Gm. $\bar{5}$ iss

15.0 Gm. $\bar{5}$ ss

6.0 Gm. $\bar{5}$ iss

60.0 Gm. $\bar{5}$ ii

(g)

R_x

Guaiacol

Benzocaine

Balsam Peru

Dentists use for relief of pain in dry sockets.

Note: Antiseptic, anesthetic, promotes healing.

Useful following exposure of alveolar process and after extraction.

Metric Apoth.
Approx. Equivalents

3.0 Gm. gr. xlvii

3.0 Gm. gr. xlvii

9.0 Gm. $\bar{5}$ ii gr. xi

(h)

R_x

*Aethyl Aminobenzoate

Alcohol

Oil Cinnamon

Liquor Amaranth

Dist. Water q. s ad

Sig: Topical Anesthetic.

Note: Apply to mucous membrane and wait two minutes before inserting needle.

Antiseptic.

Ethyl Aminobenzoate 10% in 70% alcohol.

*Common name—Benzocaine; proprietary name—Anesthesin.

Metric Apoth.
Approx. Equivalents

6.0 Gm. $\bar{5}$ iss

44.5 cc. $\bar{5}$ iss

0.13 cc. m. ii

0.13 cc. m. ii

60.0 cc. $\bar{5}$ ii

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
April 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

The needle puncture need not be felt if an efficient topical anesthetic is used. Pain from dry sockets can also be relieved.

The treatment of a dental patient should extend into his home. A restful night is conducive to restoration and may be produced with hypnotics.

Paraldehyde and Carbromal are rapid-acting hypnotics. Carbromal is of shorter duration. Some patients can sleep well if once started. Carbromal is helpful in bringing about this condition. Paraldehyde maintains sleep for a longer period of time.

Barbital acts in about one hour to produce a longer period of sleep than the two previously mentioned. It is considered one of the safest hypnotics

of longer duration. For rapid action, short duration, with prolonged sedation, use sodium pentobarbital. Phenobarbital or Luminal acts largely on the motor areas, relieves nervousness, and promotes sleep. Barbital and Phenobarbital may be prescribed in liquid form if desired, as indicated in the formulas.

Two formulas are recommended for painful sockets after extraction and dry sockets. They aid the clotting of blood in the socket. It is possible to make the ointment of any consistency you desire if the ones suggested are too stiff or too soft.

It is doubtful if there is available to the dental profession a more efficient topical anesthetic than Ethyl Aminobenzoate in 70% alcohol. It is suggested that the surface be swabbed before applying the anesthetic. No other antiseptic is needed.

If you should have any of your own formulas which you would like to discuss with us, please do not hesitate to do so.

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Dispensing Dangerous Drugs

The following letter from Mr. W. G. Campbell, Chief, Food and Drug Administration, was published in the March issue of the *National Capital Pharmacist*, the publication of the District of Columbia Pharmaceutical Association.

"The volume of correspondence which the Food and Drug Administration continues to receive regarding the obligations under the Food, Drug and Cosmetic Act of retailers of drugs suggests that there may still exist some uncertainty in regard to this subject.

"The law defines as misbranded drugs which are dangerous to the health when used in the dosage, or with the frequency or duration prescribed, recommended or suggested in the labeling thereof.

"It is the purpose of this Administration to begin, as soon as arrangements can be completed, to investigate conditions under which drugs in the classifications mentioned are being distributed in the District of Columbia. More or less constant surveillance will be maintained as conditions found may necessitate

"As examples of such articles may be mentioned preparations containing thyroid, aminopyrine, cinchophen, neocinchophen, barbituric acid derivatives, benzedrine sulfate and sulfanilamide.

"We are anxious that pharmacists in the District of Columbia be fully informed of the requirements of the law so that no unwitting violation of its provisions occurs. We should appreciate having the

facts given publicity through the medium of the *National Capital Pharmacist*."

It is understood that the investigation referred to will begin on April 22nd or shortly thereafter.

Following the receipt of this letter a Contact Delegation was organized to work out with the Food and Drug Administration a program of compliance which would be explicit and which would provide the pharmacists of the District with definite information about their responsibilities. The members of the delegation are:

E. F. Kelly, Secretary, AMERICAN PHARMACEUTICAL ASSOCIATION; Carson P. Frailey, Vice-President, American Drug Manufacturers Association; W. Paul Briggs, Dean, George Washington School of Pharmacy; W. H. Whittlesey, President, D. C. Pharmaceutical Association; S. F. Higger, Vice-President, D. C. Pharmaceutical Association; A. C. Taylor, President, D. C. Board of Pharmacy; S. J. Waddell, President, Travelers Auxiliary, D. C. P. A.; Carson Gray Frailey, Lecturer on Pharmaceutical Law, Temple University.

The Committee found the Administration

anxious to coöperate in the enforcement of the Federal Food, Drug and Cosmetic Act in the District which is directly subject to the law.

The following notice, dated April 10th and effective at once, was sent to every pharmacist in the District by the Association.

Read This Carefully and Profit by It

Do not sell Thyroid, Benzadrine Sulfate, Barbituric Acid, Aminopyrine, Cinchophen, Neocinchophen, Sulfanilamide, Sulfapyradine and derivatives or combinations of these drugs.

Any of these drugs, derivatives or combinations may be dispensed on a physician's prescription.

When dispensing on a prescription:

1. Attach a "Cannot be refilled" label to the container.
2. File prescription and mark "Do not refill."
3. On the *Specific authorization* (written, verbal or telephone) of the *prescriber* such prescriptions may be refilled a "reasonable number of times."

(It is strongly recommended that such prescriptions not be refilled more than two (2) times unless you have obtained a *new written prescription*. The Pharmacist assumes the full responsibility for refilling such prescriptions.)

4. When refilling on physician's authorization *record date and hour of authorization and compounder's name* on the back of the original prescription or prepare and file a new pre-

scription indicating on the prescription that it represents the *first* or *second* refilling of the original order.

Such records are necessary when refilling on verbal authorization but are not necessary if you receive a new prescription written by the attending physician.

Do not refill any prescription for the above-mentioned drugs, derivatives or combinations more than two (2) times on verbal authorization.

All of the above also applies, with equal force, to prescriptions filled and/or refilled prior to this notice.

Penalties (for violation of the Food, Drug and Cosmetic Act): From imprisonment for one year or \$1000 fine to imprisonment for three years or \$10,000 fine or both.

Read the Law and Regulations—Act in Good Faith—Use Judgment.

It is understood that later the following six drugs when used as anthelmintics and for which suggested label warnings were recently issued, will be classed with the drugs mentioned above and made subject to the same restrictions: Carbon Tetrachloride, Tetrachlorethylene, Aspidium, Santonin, Chenopodium Oil and Thymol.

Further conferences will be held with officials of the Food and Drug Administration in respect to other provisions of the Act. Pharmacists and officials in the States will, no doubt, carefully study the decisions reached in the District of Columbia.

Pharmacy Relief Set-Up in Wyoming

1. (a) Prescriptions for a single U. S. P. or N. F. ingredient or compound to be charged at cost, plus five cents for container, plus thirty-five cents professional fee.

(b) Prescriptions calling for two or more U. S. P. or N. F. ingredients or compounds to be charged at cost, plus five cents for container, plus fifty cents professional fee.

(c) Exceptions to the above are cod liver oil, mineral oil and running alcohol, pints; and milk of magnesia, pints, which price shall not exceed fifty cents.

2. Surgical supplies and dressings, cost plus 33 1/3 per cent markup.

3. Insulin syringe not to exceed \$1.25. Insulin needles 15 cents, two for 25 cents. Insulin, all units, established minimum Fair Trade prices.

4. The only other exceptions to U. S. P. or N. F. ingredients or compounds shall be the following: Cofron Elixir, Ipral Tablets, Lextron Capsules, Lirimin Capsules, Nembutal Capsules, Ortol Sodium Capsules, Sulfanilamide tablets and Ventriculin, at cost price, plus 30 per cent markup, or minimum Fair Trade prices.—*Pacific Drug Review*.

Northwest Pharmaceutical Executive's Association, Inc.

On February 8th and 9th, association officers from six northwest states, sponsored by the Idaho State Pharmaceutical Association, held a meeting in Boise. As a result the Northwest Pharmaceutical Executive's Association, Inc., was formed, with the following officers: *President*, J. A. Riedel, Boulder, Mont.; *Vice-President*, Jack J. Lynch, Portland, Ore.; *Executive Secretary-Treasurer*, James J. Lynch, Boise, Idaho. The six states represented were: Idaho, Montana, Oregon, Utah, Washington and Wyoming. Colorado has been invited to become a member and the matter is under consideration.

The sponsors feel that many of the problems confronting pharmacy and the drug trade in general can better be handled as an organized group representing a much greater number of retail outlets than would be the case with the state associations individually. This is particularly true in regard to relations with Fair Trade manufacturers and with manufacturers who are being solicited for Fair Trade Contracts.

A Proposed American College of Pharmacists

By Leonard J. Piccoli*

Within the last few years various groups of pharmacists interested solely or principally in the practice of pharmacy, have formed organizations in various parts of the United States. There has been considerable discussion regarding the formation of local groups of such pharmacists where no organization now exists and also a national group.

That there is a need and place for such organizations is shown by the interest demonstrated whenever and wherever such organizations are formed or proposed.

Among the first of such organizations was The Association for the Advancement of Professional Pharmacy in New York City. Practically every pharmacist operating a professional type pharmacy in the New York area and a great many pharmacists from all parts of the United States who do not have a local group of their own are members of the A. A. P. P.

Through the descriptions of the activities of the A. A. P. P. that appeared in pharmaceutical publications throughout the country, a surprise and a problem developed. Pharmacists from widely separated areas wrote requesting membership. With the idea of finding out how many possible members there might be in the United States, The Association wrote to the deans of the colleges of pharmacy and to the secretaries of the state boards of pharmacy, requesting a list of pharmacists who could be recommended by the person written to, as eligible for membership in the A. A. P. P.

The answers received varied widely. Some supplied a comprehensive list of names of both strictly professional and professional types of pharmacies and some doubted the existence of any such pharmacies in their particular area.

However, the answers showed that some states do not have a sufficient number of strictly professional or professional types of pharmacies to form an organization and that others have too few to form a successful one. Most of the heavily populated areas can have fine, successful groups.

There are sufficient professional pharmacists to form a national body. It is therefore suggested that such a body be formed, to be called The American College of Pharmacists (?). It has been suggested through our contacts with many outstanding educators and professional pharmacists that the American College of Pharmacists (?) be organized in coöperation with the AMERICAN PHARMACEUTICAL ASSOCIATION.

Through the efforts of a Constitution Committee of the A. A. P. P. which consisted of the following: Henry V. Army, N. J.; L. D. Bracken, Washington; Fred S. Frankfurter, N. Y.; Cyrus

Hakes, Chairman, N. Y.; J. Leon Lascoff, N. Y.; A. L. Malmö, Minnesota; W. E. Means, Pennsylvania; J. E. O'Brien, Nebraska; Ronald Robertson, Washington; O. U. Sisson, Illinois, and George Tozer, Washington, a tentative constitution has been drawn up for the proposed American College of Pharmacists (?). "The following are excerpts of the Tentative Constitution:

Name: The name of the organization shall be "The American College of Pharmacists (?)."

Objects: To provide an Association wherein practicing pharmacists who are interested primarily in the practice of pharmacy may meet to discuss and act on the problems of their profession. To maintain and advance the practice and standards of pharmacy as a profession. To assist the efforts of the colleges of pharmacy and pharmaceutical organizations in improving pharmacy. To assist undergraduate and graduate students of colleges of pharmacy to obtain experience necessary for a proper training in pharmacy. To endeavor, by such means as may seem proper to the membership of the Association, to bring to the attention of the public, physician, dentist and the allied health services facts regarding the services rendered by professional pharmacists, to promote the prescribing of official preparations or any other matter which the membership may decide will better the profession of pharmacy.

Membership: (Among the many requirements which space does not permit the description of in detail, we have the following:)

The college shall consist of all members of the corporation, such members to be designated as Fellows.

Fellows must be licensed to practice in their respective states and actively engaged in the practice of pharmacy. They must be sole owners or owners of at least an interest of the pharmacies they operate or chief pharmacists of recognized hospitals. They must have been so engaged for at least a year.

It is required that Fellows be members of the AMERICAN PHARMACEUTICAL ASSOCIATION in good standing.

Membership shall be for one year and is renewable only if the status of the member remains unchanged.

Honorary Fellow: Any person who through eminent service has advanced professional pharmacy may be elected an Honorary Fellow of the College. Honorary Fellows shall not be required to pay fees or dues and shall enjoy all the privileges of the other Fellows except those of voting and holding office.

Pledge: The following pledge must be signed by all applicants for Fellowship in the College: "I have read the Constitution and By-Laws of the American College of Pharmacists (?). I hereby

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accept, as a condition of Fellowship in the College, all its principles, declarations and regulations. I pledge myself to refrain from practices which tend to discredit pharmacy and devote my best efforts to the advancement of my profession."

Sections: Sections of the college may be organized in geographical centers to support and promote locally the aims, purposes, functions and ideals of the College, provided the organization, constitution and by-laws of such section be in harmony with those of the College.

Emblem and Certificate: An Emblem, to be used by a Fellow of the College to identify his pharmacy as one conducted by a Fellow of the College shall be selected by the Executive Committee, such Emblem together with the Certificate bearing the seal of the College and identifying the holder as a Fellow at the time of his acceptance into Fellowship. Such Emblem and Certificate shall remain the property of the College and their return or destruction shall be demanded whenever, for any reason, a member ceases to be a Fellow of the College."

Copies of the Tentative Constitution will be sent to both educators and pharmacists in practice in all parts of the United States for comments before it is redrafted into another tentative form for presentation before the conference of Professional Pharmacists in Richmond. We have been making every attempt to coöperate with the Committee representing the Conference of Professional Pharmacists so that the American College of Pharmacists (?), the American Academy of Pharmacists (?) or some similar named organization will be well on its way toward organization after the Richmond Meeting of the AMERICAN PHARMACEUTICAL ASSO-

CIATION. We shall be pleased to receive comments from any one interested before the meeting in Richmond.

It can be readily understood from the above that Fellowship as suggested above would be restricted to practicing pharmacists who operate pharmacies of a professional character and who are members of the AMERICAN PHARMACEUTICAL ASSOCIATION. The principal idea behind such a move is to organize and build up the professional character of pharmacy and pharmacies. It is believed that the new college requirements, the longer pharmacy curriculum, the higher state board requirements and various other factors well provide men well trained for their duties. These men are either going to have trouble finding positions where their talents and training can be utilized, or are going to give up all plans of practicing pharmacy and go into other allied fields. So it seems time to stress "Pharmacy." Hence the idea of a professional group of this type.

When complete, the Constitution for the proposed American College of Pharmacists (?) will contain a description of what the pharmacy of a Fellow should and should not offer in services, its equipment and such subject matters as will be deemed necessary after all comments and criticisms of men who are known to be interested in this field are received.

We have already received a great deal of comment which we do hope to have completely compiled for presentation at the Conference of Professional Pharmacists in Richmond during the Meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Dr. and Mrs. Anderson Honored

On Wednesday evening, April 10th, at the annual banquet, Pennsylvania Hotel, New York City, Dean Emeritus and Mrs. W. C. Anderson were honored on the occasion of their fiftieth wedding anniversary and their seventy-fifth birthdays. Dr. Hugo Schaefer, dean of the Brooklyn College of Pharmacy, and Dr. Anderson's successor, was Toastmaster. Dr. Anderson installed the officers of the New York Pharmaceutical Council for 1940-1941.

The Oklahoma Pharmaceutical Association met for the fortieth time on April 9th to 11th, in Tulsa. Among the speakers were: Hon. E. W. Smartt, chairman State Board of Public Affairs and former secretary Oklahoma Retail Merchants Association; W. H. Hartigan, chief of the Federal Food and Drug Administration, Central States Area, Kansas City, Mo., "The Enforcement of the Federal Food, Drug and Cosmetic Act;" Dr. Robert L. Swain, editor *Drug Topics*, "The Retailer's Stake in Fair Trade;" Joe Shinc, secretary of the Illinois Pharmaceutical Association, "Potential Sales Possibilities;" Hon.

Leon C. Phillips, Governor of Oklahoma; Dr. L. J. Klotz, "Pharmacy in Western Oklahoma;" Orville L. Prather, president, Oklahoma Association.

Mr. Fred A. Jacobs, Secretary of the Ontario Retail Druggists' Association, has resigned his duties due to continued illness. This news comes as a surprise to many in the drug trade, but a feeling of regret is had by all. In 1918, when the association came into being, Mr. Jacobs was elected Secretary-Treasurer, and has remained in that position since. For many years he has been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION and its members and JOURNAL wish him a complete recovery.

Dependable Modern Treatments for Burns, by HAROLD JOE DAVIS, Safety Engineer, author of "Industrial Hazards of Static Electricity," member of the American Society of Safety Engineers. It is a booklet of nine pages, the matter has been condensed for reference, adapted for emergencies. Paper cover, price 50c, and may be obtained from the author, 3927 E. Admiral Place, Tulsa, Okla.

Local and Student Branches

ALABAMA POLYTECHNIC STUDENT BRANCH.—The first meeting of the month of February was held in Ross Chemistry Building at seven o'clock. The meeting was called to order by President Hiller. President Hiller stated the possibility of sharing honors with the chemistry students at the Chemical Ball, saying he would know definitely in a few days. Mr. Lurie proposed that the society give a barbecue party and the motion was carried and accepted.

Election of officers took place for the year 1940, and the following were elected: *President*, Charles Barron; *Vice-President*, Ulmer Wilson; *Secretary*, Beth Murphy; and *Treasurer*, Dawson Waits.

Prof. Hargreaves, faculty adviser, commended the retiring officers: George Hiller, Charles Barron, Ben Eich and Bill Swift, and said that Mr. Eich should be especially commended for his excellent work as secretary.

Dr. Blake, head of the pharmacy department, announced that Mr. Merriam of Beckton-Dickson Co. would speak in Ross Auditorium on Wednesday evening and urged everyone to attend the very interesting lecture.

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The second meeting for the month was held February 26th at 7:15. Ulmer Wilson, vice-president, presided in the absence of the president. There was no business to be discussed.

Miss Mary Mitchell, senior in pharmacy, gave a very entertaining vaudeville sketch, "Gee, whiz!" The members were delighted and heartily applauded.

BETH MURPHY, *Secretary*

BALTIMORE.—The April meeting was held at the School of Pharmacy on the 9th, at 7:45 P.M. The meeting had been arranged so that the members might hear Dr. C. W. Chapman deliver a lecture on "Biological Assays of Certain Drugs," the lecture being one of a series to be presented before a group of pharmacists attending the current Refresher Course in pharmacy at the school, and which interested the larger group holding Branch membership.

The meeting presented an opportunity to those members and friends of the Branch who had not had the privilege of hearing Dr. Chapman discuss his work since he assumed the *Emerson Professorship* of Pharmacology at the University. Those who had, welcomed the opportunity to hear him again.

Refreshments were served after a short business session which followed the lecture. Non-members attending the Refresher Course were invited to remain as guests of the Branch until proceedings were concluded.

ROBERT S. FUQUA, *Secretary*

CHICAGO.—The 263rd meeting was held Tuesday evening, February 20th, in the College of Medicine

Building of the University of Illinois. President Templeton opened the meeting with the announcement of the coming A. Ph. A. Convention at Richmond in May, mentioning the fact that several of the members of our faculty would be in attendance. He then appointed Dr. G. L. Webster as reporter covering the Convention for the Branch.

The more than sixty members then heard Dr. G. L. Webster and Mr. F. T. Maher of the College of Pharmacy staff present an interesting and informative discussion on "The Chemistry and Pharmacology of Sulfanilamide and Its Derivatives."

Dr. Webster gave a chronological history of the compounds beginning with Eisenberg's discovery in 1913 of the bactericidal powers of chrysoidine, discussing the findings of workers following Eisenberg, through the prontosil and sulfanilamide work, up to the latest discoveries by Fosbinder and Walter, and Barlow and Homburger on sulfothiazole and related compounds. He also discussed the effect of the addition of various groups to some of the fundamental ring structures on the bactericidal and bacteriostatic properties of the compounds, bringing out at the same time resulting changes in physical and chemical properties. He also discussed the preparation of sulfanilamide and other derivatives in common use at the present time.

Mr. Maher discussed the pharmacology, toxicology and present therapeutic applications of these compounds. Under pharmacology, he talked on the administration of the drugs, their distribution and absorption in the body fluids, and their conjugation in the human and animal bodies. He also discussed the existing theories on their modes of action in their antibacterial activities.

Under toxicology, the speaker discussed the unpredictable damaging effects of the drugs in some cases, classifying them into four general group types and stressed the importance of blood-picture manifestations of their toxicology. Mr. Maher also brought out the lack of specificity of treatment for many of these toxic manifestations.

Under present therapeutic applications of these agents, he brought out the use of sulfanilamide chiefly as an antistreptococcic, the use of sulfapyridine as an antipneumococcic, and of the newest member of the group, sulfamethyl-thiazole as an antistaphylococcic, citing, however, evidences of successful treatment of other bacterial and virus diseases as *gonorrheal conjunctivitis*, *undulant fever* and *trachoma*.

The interest shown by the audience was proved by the necessity for President Templeton to bring the meeting to an official adjournment, closing the interesting and prolonged discussion into which a number of members and guests entered after the completion of the speakers' discussions.

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CHICAGO.—The Branch held its 264th monthly meeting on March 19th. The more than fifty members, guests and friends present heard Dr. Eugene W. Schoeffel of the Laboratory of the Council on Pharmacy and Chemistry of the American Medical Association present an illustrated talk on "The Application of Microchemistry by the Practicing Pharmacist."

Dr. Schoeffel discussed the possible extended field of use of microchemistry in relation to the many tests for official products stocked and dispensed by the pharmacist. Certain official tests, he explained, which now take one to two hours to run could be performed in a few minutes using microchemical technique. Many of the European pharmacopœias made use of this type of analysis, and as an outstanding example Dr. Schoeffel pointed out the official formulary of Switzerland—the Swiss Pharmacopœia.

Among the advantages of using the technique, the speaker stressed the following:

1. Small amounts of original material necessary for analysis—milligrams instead of the larger samples necessary in many of the existing methods.

2. The comparatively short time necessary for the completion of the tests as compared with the lengthy procedures now used in some cases.

3. The availability and low cost of the apparatus commonly used in the techniques. Majority of the glassware may be prepared by any person who has acquired the simple art of elementary glass blowing.

Dr. Schoeffel illustrated the microchemical test for sulfanilamide and also presented movies on the techniques including preparation of various pieces of apparatus and the performance of several assays. He suggested microchemistry as a hobby for the retail pharmacist interested in furthering his knowledge along chemical lines, stressing the advantages heretofore listed which would make it rather simple for the start of such a hobby which might ultimately reap rich rewards.

Dr. Wilson of E. H. Sargent & Co. was also present at the session with an extensive display of microchemical apparatus, including glassware, calorimeters, centrifuges, etc.

This interesting meeting was brought to an end with a rising vote of thanks to Dr. Schoeffel for his informative and educational discussion.

EDWARD E. VICHER, *Secretary*

CITY OF WASHINGTON.—The third meeting of the year was held in the Institute of Pharmacy at 8:00 p.m. on March 18th. President Kenneth L. Kelly presided.

Mr. Alfred L. Tennyson, Chief Council for the Narcotic Bureau, addressed the Branch on "The Harrison Narcotic Act and the Pharmacist." He discussed the six classifications for the handlers of narcotics. They are the compounder, the wholesaler, the retailer, the practitioner, the manufacturer of exempt preparations and the laboratory class for

educational institutions. The method of always having an official order form accompany all transfers of narcotics was stressed. He especially emphasized that the Bureau wished to have the pharmacists exercise "good faith" in all their dealings with narcotics, and he was pleased to say that they generally did so. Mr. Tennyson expressed the hope that in the future all exemptions could be eliminated, except codeine. This would be helpful to enforcement and would place no burden on the pharmacist.

Dean W. Paul Briggs moved that a rising vote of thanks be extended.

President Kelly reported that we now have \$147.97 in the treasury.

Mr. Paul Reznick, chairman of the program committee, reported that for the April meeting some phase of the U. S. P. would be discussed and that the May meeting is to be postponed. President Kelly suggested consulting a calendar at the April meeting to determine what to do in May.

Mr. L. E. Warren presented the new constitution, paragraph by paragraph, and each part was voted upon and passed.

Dean W. Paul Briggs made a motion to retain the present name of our Branch. Motion was carried.

Mr. L. E. Warren moved that the proposed amendments to the constitution be discussed at this meeting and be voted upon at the April meeting.

Upon the acceptance of the new constitution, Dean W. Paul Briggs moved that the present officers be retained for the year 1940-1941. He later withdrew his motion to suggest that the president appoint a nomination committee in April, and that this committee select the present officers for the year 1940-1941.

Many George Washington University School of Pharmacy students were present and were introduced by Dean Briggs.

CHARLES O. WILSON, *Secretary*

CONNECTICUT COLLEGE OF PHARMACY STUDENT BRANCH.—The last regular meeting of the Branch was held on Friday, February 23rd at the Connecticut College of Pharmacy. The secretary's report was approved. President Kraut then called upon Vice-President Milton Zimmerman to introduce the guest speaker of the evening, Dr. Louis H. Nahum, prominent heart specialist of New Haven.

Entitling his talk "Diseases of the Heart," Dr. Nahum gave an excellent summary of the factors that the physician must know about before he can prescribe, treating with special emphasis the drugs used for various heart conditions.

In angina pectoris and other cases where it is necessary to increase the contractive force of the heart, the digitalis group of drugs is used. Convallane, a new alkaloid extracted from Lily of the Valley Root has digitalis action and has proved very good. Strophanthus and squill preparations also have digitalis action with the difference that digitalis is excreted more slowly from the body.

One of the outstanding advantages of digitalis medication is that the patient never gets used to it; the action never varies—the hundredth dose has the same effect as the first.

In dilating the coronary arteries, there are two classes of drugs used. These are (1) the xanthine group, consisting of caffeine, theophylline and theobromine and (2) the vasodilator group, consisting of nitrites. Dr. Nahum believes the action of compound and xanthine preparations such as theophylline with sodium acetate to be of no more value than the compound theophylline itself. He also considers the nitrites as the most important class of drugs next to digitalis used in cardio troubles. Action of erithrityl tetranitrate is superior to that of nitroglycerin because it is slower and longer acting, having an effect from three to four hours, whereas the nitroglycerin is quick acting, lasting only fifteen to twenty minutes.

Mention of vitamin B as a very important component of the enzyme of muscular activity was made. Lack of vitamin B causes a non-rigorous contraction of the heart muscle; therefore it is easily seen that vitamin therapy is important here.

Careful use of quinidine is effective in paroxysmal tachycardias; the action is such that it lengthens the refractory period and slows down the continuity of the heart. But the trouble with quinidine is that there are no intravenous preparations of it and it was found that quinine could be used as it produced the same results and was very successful. In some patients suffering from tachycardias, the heart may be arrested without drugs; this is done by pressing the carotid sinus in the neck which discharges the vagus nerve with a stimulus to effect a slowing down of the heart.

In concluding, Dr. Nahum said that vascular troubles such as arteriosclerosis was probably due to a chemical substance in the blood which came from a damaged artery and caused vascular degeneracy and hypotension. As a doctor doing research at Yale has isolated two chemicals, the exact composition of which is yet unknown, but each of which will effect the results just mentioned, it will be in the not too far future that when we know the exact chemical, we will be able to neutralize it with another. The primary result of this will be the wiping out of senility; the decay of organs due to vascular diseases. Thus, it is expected, that when we know the chemical, it will not be long before the cause to mental diseases is removed.

Following the lecture there was a very interesting discussion Dr. Nahum was accorded a sincere vote of thanks for his splendid talk.

There was then presented a film, "The Control of Pertussis," which was made available through the courtesy of Eli Lilly & Co. Announcement was also made that the next monthly meeting would be along the lines of a Professor Quiz Contest with prizes awarded to the winning participants.

CHAS. BLUMENTHAL, *Secretary*

MICHIGAN.—The February meeting was held Tuesday evening, February 27th, at the Wayne County Medical Society Building. Twenty-five members and friends enjoyed the usual excellent dinner that preceded the meeting. The number was more than doubled when the meeting was called to order by President H. A. K. Whitney at 8:15 P.M. The secretary's minutes of the previous meeting were approved.

Under new business Mr. Seltzer was given the floor and said, "Most of us are aware of the death of Dr. Alviso B. Stevens, formerly dean of the College of Pharmacy of the University of Michigan. We who studied under him are under a very great obligation to Dr. Stevens. I believe I am more so than any other man in the profession for it was Dr. Stevens who gave me my start in pharmacy and I therefore move that the following resolution be sent to the family of the late Dr. Stevens." The motion was seconded by Mr. W. H. Blome and carried unanimously. The resolution follows:

"With the passing of that great and gentle man, Alviso B. Stevens, the Michigan Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION gives expression to the affection which its members, especially those who have been intimately under his benign influence, feel most deeply.

"Dr. Stevens—scientist, teacher, research worker—preeminently endowed with those attributes enumerated by his Master: meekness, humility, hunger for righteousness, seeker after peace and purity of heart, inspired those coming within the sphere of his influence, to observe things 'honest, just and of good report.'

"Verily he built his house upon the Rock; and the winds of oblivion and the floods of disparagement shall not prevail against it.

"Of him as of few men, may it be said, 'his gentleness hath made him great.'"

Mr. Webster read a letter by Dr. E. Fullerton Cook thanking the members for their enthusiasm in making the joint meeting of the Wayne County Medical Society and the Detroit Retail Druggists' Association before whom Dr. Cook spoke on the U. S. P. a real successful meeting.

Mr. Seltzer then told the members of the able and efficient work done by the allied health professions in administering the medical needs to the indigent needy under the F. E. R. A. He said the advisory council has made every effort to have the services continued and give the mayor a true picture. The pharmacist committee has met with the Welfare Committee and the Council of the Wayne County Medical Society at which time a plan was suggested and was to be presented to the mayor the plan of Dr. Novy and Dean Norris of the College of Medicine of Wayne University which would continue the physician and pharmacist and patient relationship which has been so successful and desirable from every angle. Mr. Seltzer called for volunteers to help price prescriptions which have snowed the committee under since the mayor announced the

losing of the Medical-Dental offices at the Wayne County Medical Society.

There being no other new business, President Whitney introduced the speaker of the evening, Dr. Morris H. Marks, a physician and practicing attorney. He presented his opinions on the problems facing the physician and pharmacist under the new Pure Food, Drug and Cosmetic Law. He gave a complete and interesting history of the law in its making and said the passage of the same no doubt was hastened by the unfortunate Sulfanilimide case. He gave much credit for its passage to Dr. Copeland, a member of the United States Senate, who died shortly after the passage of the bill. His untiring efforts and ceaseless work in this legislation no doubt was the cause of his death.

Dr. Marks stressed the labeling of packages by the pharmacist under the new law. This, he said, was most important from the pharmacists' standpoint and care to comply with the labeling law was absolutely necessary to avoid serious trouble. He said no pharmacist could afford to be a "guinea pig" and be used as an experiment to find out the intent or ruling of the commission on the law.

Dr. Marks' talk created a very spirited discussion which was entered into by nearly everyone in attendance. The discussion was led by Mr. R. L. McCabe, Dean R. T. Lakey, W. H. Blome, Mr. Krupp of Toledo, Mr. Mills, Mr. Becker and Mr. L. A. Seltzer. The discussion proved most valuable to the members and helped to clarify many of the problems arising through the passage of the law. The problem that still seems to be the one factor that so much of the law hinges on, namely, "what constitutes interstate commerce," remained a much debatable question.

Mr. Whitney joined Dr. Marks in answering the bombardment of questions fired at the speaker from every direction. Mr. Seltzer moved a rising vote of thanks to Dr. Marks for his interesting and illuminating talk on a very difficult subject. The motion was seconded by Mr. R. L. McCabe and enthusiastically agreed to by the assembly.

BERNARD L. BIALK, *Secretary*

NEW YORK.—The regular meeting was called to order by President Hauck at 8:35 P.M. on Monday, March 11, 1940, at the Columbia University College of Pharmacy. The minutes of the February meeting were approved. The report of the treasurer, Mr. Currens, was received and ordered attached to the minutes.

Mr. F. C. A. Schaefer reported that he was having partial success in his attempts to have delinquent members reinstate themselves.

The report of Dr. Cosmo Ligorio for the Committee on the Progress of Pharmacy was read by the secretary, and ordered attached to the minutes.

President Hauck read a letter from the New York Pharmaceutical Council announcing its annual banquet, to be held at the Hotel Pennsylvania on April 10th. Dr. William C. Anderson, first president

of the Council, and his wife will be the guests of honor.

A telegram from the Association for the Advancement of Professional Pharmacy drew the attention of the Branch to an article written by Mr. Francis Chilson in the February issue of *Drug and Cosmetic Industry*. It was regularly moved, seconded and carried that the Branch go on record as strongly condemning the derogatory and unjust statements appearing in this article. On request, President Hauck read the article.

The Scientific Section of the meeting was devoted to a "Survey of the Vitamins" by Dr. D. M. Copley, director of vitamin research at the Norwich Pharmacal Company. Dr. Copley traced the history of vitamin study and outlined the characteristics and sources of the various vitamins. After considerable discussion, a rising vote of thanks was accorded the speaker.

Appropriate exhibits of vitamin products were provided by Lederle Laboratories, Merck and Co., Norwich Pharmacal Co., and E. R. Squibb and Sons.

HORACE T. F. GIVENS, *Secretary*

NORTHERN NEW JERSEY.—At the regular meeting held at the New Jersey College of Pharmacy in Newark, N. J., March 18th, the following officers were elected: *President*, Dr. Richard A. Deno; *Vice-President*, Anthony Scacciaferro; *Treasurer*, Frank Wilson; *Secretary*, C. L. Cox; *Delegate* to the A. Ph. A., Harold DeWitt Goulden; *Alternates*, George C. Schicks and Dr. Richard A. Deno.

Mr. Robert W. Rodman, Editor of the *Druggist Circular*, spoke on "How to Label Your Own Preparations under the New Food, Drug and Cosmetic Act."

C. L. Cox, *Secretary*

PHILADELPHIA.—The March meeting was called to order by Chairman Osol at 8:30 P.M. on March 12th, at the Philadelphia College of Pharmacy & Science. The reading of the February minutes was dispensed with.

Mr. Drain nominated Messrs. Maurice Tun, Eloff Johnson, Jacob Katz and Evan A. Jones to membership. They were duly elected.

Dr. Penn offered a motion that hospital pharmacists join as individuals but that they have the authority to form a sub-group within the Branch. This was adopted.

Dr. Osol introduced Dean Griffith who spoke on "Dyestuffs and Disease." Dr. Griffith's informative discourse was amplified with demonstrations and made still more interesting by the speaker's characteristic wit. He accomplished his purpose of stimulating general interest in this broad field so that others are bound to delve deeper in the phases that appeal to them.

Dr. Harrison read the report of Mr. Simpson to the effect that the accounts of the Association for the past year had been audited by him and found in order.

The nominating committee recommended Arthur Leberknight for President, George W. Drain and Arthur E. James for 1st and 2nd Vice-President, respectively, Rudolph H. Blythe for Secretary-Treasurer, and Arthur Osol for Delegate to the House of Delegates. The body accepted the committee's recommendations and the President ordered the secretary to cast the ballot.

Dr. Osol turned the chair over to the incoming president, who introduced the other officers-elect.

Dr. Harrison expressed the appreciation of the Branch to Dr. Osol and his fellow officers for their services during the past year.

A rising vote of thanks was accorded the speaker.

RUDOLPH H. BLYTHE, *Secretary*

PITTSBURGH.—The February meeting was held in the main lecture room of the Falk Clinic. Dr. Edward C. Reif presided. Minutes of the January meeting were read and approved. Communications from Dr. E. F. Kelly and Dr. Ernst Little were read.

The program was presented by Dr. J. H. Wurdack, Professor of Chemistry, University of Pittsburgh, and Mr. H. Joseph Brandl, Pharmacist, McKennan Pharmacy, Pittsburgh. Their subject was "Organic Pharmaceuticals—New and Old." Under this heading they considered the production and properties of Anesthetics, Hypnotics, Anelgesics, Alkaloids, Sedatives, etc. The evolution of these organic materials from very ordinary and simple molecules to the most complex, was presented in a very informative manner.

The open forum, which is a particular feature of these meetings, followed.

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The March meeting was held in the main lecture hall of the Falk Clinic.

Clarence T. Van Meter spoke on "Modern Chemotherapy." The theory involved in the development of antiseptics and germicides containing mercury as part of an organic molecule was presented and various commercial representatives were discussed. Important commercial mercurial diuretics were also described. Starting with Ehrlich's work, Professor Van Meter traced the development of arsenic, antimony and bismuth compounds, giving especial attention to the more important members of those groups which are employed in modern therapy. Sulfanilamide was presented from an historical viewpoint starting with Gelmo's original work. Attention was focused on the various kinds of chemical attack to which sulfanilamide is susceptible, and particular treatment was given to those attacks which had led to new molecules of marked bactericidal capacities. General discussion followed.

The president then presented Mr. Frank S. McGinnis, who briefly considered the characteristics of one of the more spectacular inorganic pharmaceuticals, colloidal aluminum hydroxide.

Mr. McGinnis then presented Mr. Jack Mars, who further considered the properties of colloidal aluminum hydroxide, after which Dr. Clement R. Jones summarized the therapeutic value of this medicament in the treatment of peptic ulcer.

FRANK S. MCGINNIS, *Secretary*

ST. JOHN'S UNIVERSITY.—The meeting was called to order by the president at 5:00 P.M. on February 7th. The minutes of the previous meeting were read and approved.

The president proceeded to the appointment of the standing Committees. To acquaint the new members with the rules and by-laws of the organization, the secretary read the Constitution.

On motion of Mr. Rogoff \$5.00 of the Association's funds were voted to be used for a group picture in the Year Book. Since the cost of the picture is \$10.00 the remaining \$5.00 are to be contributed by the members.

.....

The meeting was called to order by the President February 10th, at 5:00 P.M. Minutes of last meeting were read and approved.

Professor Corcoran presented to the group an outline for preparing a bibliography on specific problems concerning pharmacy which the members wished to study, and explained the procedure for consulting various sources of information. Among topics suggested to be studied were:

"Determination of Moisture Content of Potassium Guaiacolsulfonate;" "Filtration of Aromatic Elixir;" "Solubility of Commonly Used Chemicals in Iso-Alcoholic Elixir;" "Stoke's Law Apparatus;" and "Cuticular Preparations." Reports on the progress of the work are to be submitted in a month's time.

The secretary presented to the group a résumé of the activities of the association since its organization in 1934.

A committee on Professional Relations consisting of Mrs. I. Goldberg, Miss M. Capone and Miss A. Downey was appointed by the president.

.....

The meeting was called to order by the vice-president, Mr. S. Mostofsky, on March 20th, at four o'clock. Minutes of the last meeting were read and accepted.

The reading of a bulletin from the New York Pharmaceutical Council initiated a discussion on the sale of films, vitamin products and other pharmaceutical items in grocery stores.

The program committee reported on the activities scheduled for the month of April.

Report of the Committee on the Advancement of Pharmacy followed. Abstracts of the current pharmaceutical and other scientific literature were very informative and quite complete. The members took an active part in the discussion which followed.

SISTER M. ETHELDREDA, *Secretary*

WESTERN NEW YORK.—At its regular meeting held in Foster Hall on the University Campus at 8:45 P.M. on March 7th, the Branch acted as host to the Academy of Medicine and the Buffalo Dental Association.

F. D. Leopold, M.D., E. F. Mimmack, D.D.S., and J. S. Hill, Ph.G., gave five-minute talks on "What Can Be Done to Increase Coöperation between the Pharmacist, the Dentist and the Physician." Dr. Leopold suggested that more joint meetings be held and that a committee, made up of members from each of the three professions, be appointed which would have as its function the promotion of understanding between the three branches of medicine. Dr. Mimmack said that the members of the dental profession would learn much at this type of meeting. The dentist usually avoids the use of drugs because his knowledge of them is limited. He thought that the psychological effect on the patient is much better when a prescription is given than when he is advised to get some common remedy at the drug store and concoct something in his kitchen. Mr. Hill read some of the duties of the Pharmacist as defined in the A. Ph. A. Code for Pharmacist and recommended that the Code be read by every pharmacist at least once a year. He said that the pharmacist, through his advertising, must continue to advise the public to see the doctor regularly, and the dentist twice a year.

A panel discussion on "The Preparation, Administration and Uses of Common Therapeutic Agents Prescribed by Physicians and Dentists" was conducted. On the panel representing medicine were Dr. Leopold and Dr. F. T. Schnatz; representing dentistry were Dr. Mimmack and Dr. Paul Jamesson; and representing pharmacy were Mr. Hill and Mr. A. F. Zimdahl. Many interesting questions were asked by the audience and controversial questions were discussed in a friendly manner.

MARGARET C. SWISHER, *Secretary*

American Association of Professional Pharmacists

The last meeting was a joint one between the A. A. P. P. and the Academy of Podiatry, at the Hotel Empire, February 28th. Following are the objectives and conclusions.

Pharmacists' Objectives:

1. To regain the confidence of the public.
2. To identify your pharmacy as a place where professional pharmacy is practiced and prescriptions filled accurately.

3. The pharmacy to be identified with all the professions dealing with the Healing Art.

4. Pharmacist to be a public health adviser.

5. To obtain the business from the public that is now being diverted to other sources.

Podiatrists' Objectives:

1. That the public be advised of the virtues of Podiatry as a profession.

2. To properly direct patients with foot troubles to the podiatrist who can properly diagnose foot conditions and protect public health.

3. That the pharmacist in his capacity as a public health adviser should familiarize himself with the latest developments in the profession of Podiatry.

4. To minimize counter-prescribing of medicines and reducing the sale of proprietary foot remedies over the counter and in its place accept the sale of surgical dressings, foot preparations, standard drugs and prescriptions of an ethical nature.

5. To protect public foot health by publicizing the dangers of self-medication and self-instrumentation.

How Such Objectives Can Be Brought About:

1. Frequent conjoint meetings of both professions, Pharmacy and Podiatry.

2. Fraternizing with each other, thereby familiarizing the professional men with the virtues of both professions.

3. Learn to respect each other for the knowledge each possesses in his particular calling.

4. Advise your patients or customers in each profession what a public benefactor the other professional person is and how they can serve public interest.

5. Pharmacists to make professional window displays showing the value of Podiatry service and telling the public by such window displays that the pharmacist is prepared to fill the requirements and prescriptions of the podiatrist.

6. Podiatrists should direct their patients to a pharmacy for all drug and surgical items instead of to other store emporiums.

Suggestions to All Pharmaceutical Associations:

At your conventions arrange for a section on public health professional service. Allot display space to each legalized profession dealing with public health in your county, state and national pharmaceutical conventions. Ask the organization of each profession to sponsor, build or provide material for a display setting forth the scope, progress and activity of these professions. By such visual education the pharmacist will at a glance become familiar with the activities of each profession enabling him to become a true public health adviser. Mutual understanding in interprofessional relationships will result.

Dr. A. G. DuMez, Dean of the School of Pharmacy of the University of Maryland, President of the AMERICAN PHARMACEUTICAL ASSOCIATION and Secretary of the American Council on Pharmaceutical Education, addressed the student body of the School of Pharmacy at Chapel Hill on March 29th under the auspices of Rho Chi, honorary pharmaceutical fraternity.

The management of the Graham Memorial, the Student Union at the State University, acted as host at an informal party tendered the Faculty and Students of the School of Pharmacy on the evening of January 31st.

The following students of pharmacy at the State University were pledged as members of Rho Chi at special ceremonies during the chapel hour on the morning of January 24th: Misses Blanche Burrus, of Canton; Josephine Eldridge and Rose Stacy, of Chapel Hill; R. A. Kiser, of Lincolnton; and W. K. Minnick, of Wyndale, Va.

Dean Ivor Griffith, Philadelphia College of Pharmacy, was honored in Harrisburg, Pa., on March 7th, with a dinner, attended by more than a hundred pharmacists and friends. Dr. Griffith was recently appointed a member of the Advisory Health Board of the State Department of Health.

Massachusetts College of Pharmacy will hold its annual "Open House" on April 26th.

Among the visitors at the American Institute of Pharmacy, during March, were Louis M. Roeg, Rahway, N. J.; J. H. Forsyth, Silver Springs, Md.; J. W. Tuck, Baltimore, Md.; Mrs. Paul Reznick, Washington, D. C.; Joseph Rosin, Rahway, N. J.; W. Eric Drake, Baltimore, Md.; Memoir Ray Marsh, Brooklyn, N. Y.; Fred Hester, Washington, D. C.; Nathan I. Gruz, Baltimore, Md.; Robert Hirsch, Brooklyn, N. Y.; Leonard Lapoten, Brooklyn, N. Y.; I. W. Grote, Chattanooga, Tenn.; Pasquale Panzarella, Providence, R. I.; Anthony Picerelli, Riverside, R. I.; Richard Brodsky, Providence, R. I.; Philip Sacknoph, Fall River, Mass.; Morton Creditor, Brooklyn, N. Y.; Clinton E. Van Slyke, Buffalo, N. Y.; Leo F. Redden, Kenmore, N. Y.; Hugh Craig, New York City; and about sixty students and faculty members of the Massachusetts College of Pharmacy. (See page 118, March JOURNAL.)

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Dr. Black was a graduate of the School of Pharmacy, University of Maryland. He was associated with the above firm prior to his graduation and after a number of years in the prescription department became head of their manufacturing plant. He was a member of the AMERICAN PHARMACEUTICAL ASSOCIATION, the Maryland Pharmaceutical Association and was a Mason. His widow survives.

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William Horlick, Jr., aged 64, chairman of the board of directors and treasurer of the Horlick Malted Milk Corporation which his father founded, died at his home in Racine, Wis., on April 1st.

Born in Chicago December 12, 1875, Mr. Horlick attended Racine College and King's College, in London, where he completed an engineering course. After completing his education, Mr. Horlick traveled extensively for three years in Europe and the Orient before returning to Racine where he devoted his efforts to the business his father founded.

Like his father, William Horlick, Jr.'s charities and support of local hospitals and other institutions, while never publicly announced, have been extensive.

Mr. Horlick was active in numerous organizations. He was president of the Racine Memorial Hall commission since its inception in 1921; treasurer of the Racine council of defense during the World War; an honorary member of the G. A. R., Spanish War Veterans and of the Thirty-Second Division; member of the Wisconsin State Historical Society, Explorers Club of New York, Chicago Athletic Club, American Club of London, St. Luke's Episcopal Church, Racine Elks Club and Somerset Club. A 32nd degree Mason, Mr. Horlick was a member of the Milwaukee consistory. He was drum major of the Tripoli temple band. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1913.

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IN THE NEWS

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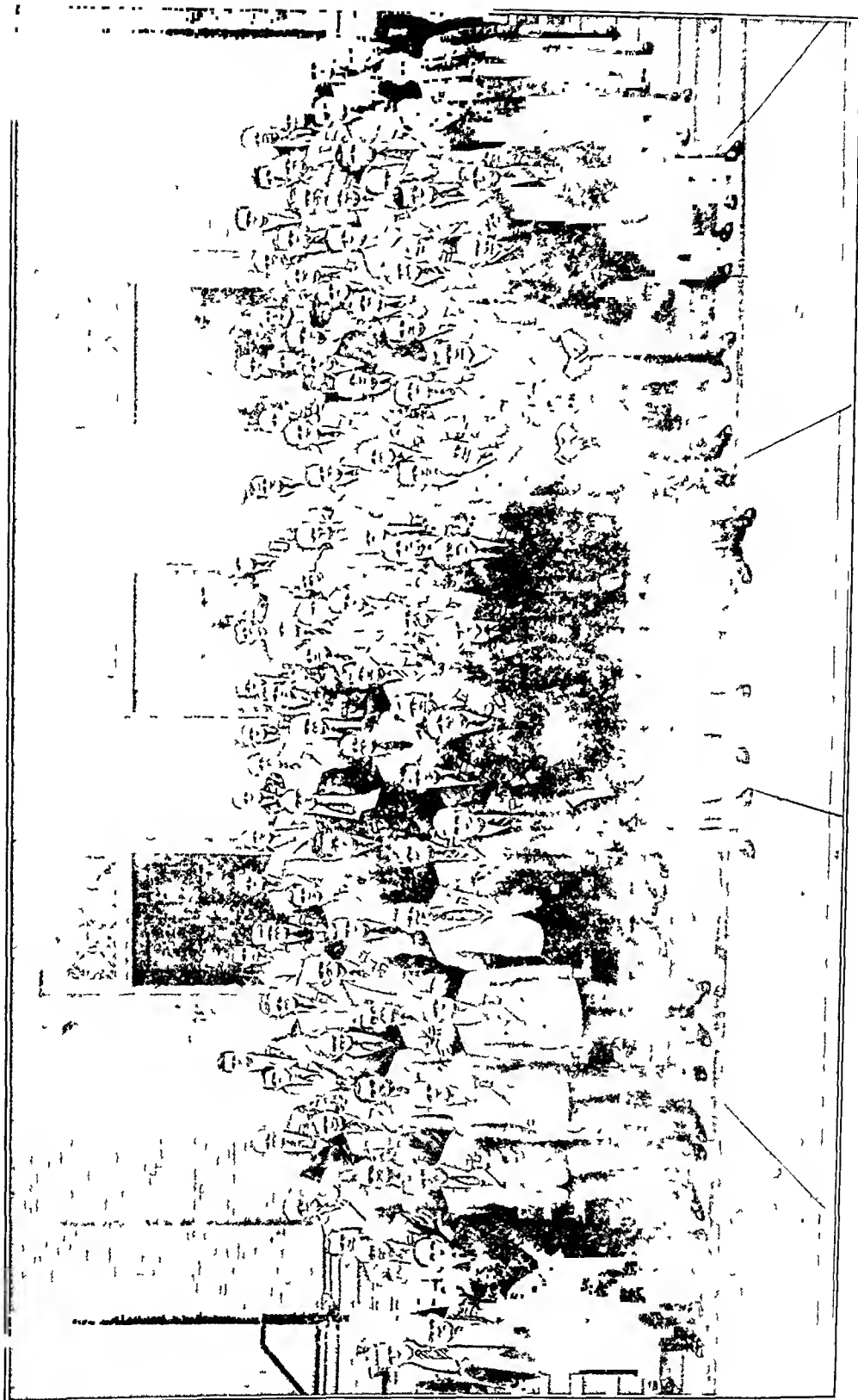
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A Group of Officers and Members Taken During the Richmond Meeting

The Program

The deep interest shown in the promotion of pharmacy as a profession was the outstanding feature of the meeting. With this interest went an evident desire to strengthen the profession to meet its greater responsibilities and opportunities. Every session was well attended and while there were at times strong differences of opinion, they usually involved procedures and methods rather than objectives or principles.

Education and Registration

As usual, the National Association Boards of Pharmacy and the American Association of College of Pharmacy held their meetings on Monday and Tuesday. The topic of greatest importance in these groups was the list of accredited schools recently issued by the American Council on Education and how it affected the Colleges Association as to membership and the Boards Association as to reciprocity between the states. The former decided to postpone a decision until next year and the latter decided to accept for reciprocity, after 1944, only the graduates of accredited schools of pharmacy. It was evident that the work of the Council is having a decided effect on the education and registration of pharmacists.

Tuesday forenoon was given over to a Joint Conference of these Associations and the A. PH. A., which was devoted to reports from five committees which deal with matters of mutual interest to the three organizations. This arrangement has many evident advantages.

The General Sessions of the A. PH. A.

The meeting opened with a General Session on Tuesday evening. President DuMez delivered a forceful address reviewing the ASSOCIATION'S many activities and also a number of observations and recommendations, too many to mention in detail. Among the more important are: closer relations between pharmacy, medicine and the other public health professions; more information about the food and drugs laws to be made available to retail pharmacists;

educational and professional exhibits at meetings of the A. PH. A. and at state and national meetings of the other health professions; that organizations of special groups in pharmacy be invited to become a part of or affiliated with the A. PH. A.; that a definite and long range program of policy be developed and followed; that steps be taken to increase the personnel and facilities in the headquarters to meet the increasing demands on the ASSOCIATION for further services and an expanded program. President DuMez named the following conditions which in his opinion may become serious obstacles to the progress of the profession if they are permitted to develop further.

"1. The growing tendency on the part of some physicians to instruct their patients to purchase drugs and medicines ordered over the counter instead of writing prescriptions for them.

"2. The increase in the dispensing of drugs and medicines by physicians and members of the other health professions in certain localities.

"3. The increase in the distribution of drugs and medicines through other than the established agencies which were intended by the framers of the State Pharmacy Laws to perform this important health service.

"4. The growing tendency on the part of some pharmaceutical manufacturers to offer for sale as specialties combinations of official drugs for dispensing as such, when such combinations should be prescribed on the basis of the needs of the individual patient and be compounded and dispensed by pharmacists."

A review of the resolutions adopted later will show what was done in response to the President's recommendations and observations (see page 193).

Dr. Walter Clarke, Executive Director, American Social Hygiene Association, spoke on "The Role of the Pharmacist in Combatting Venereal Diseases." This Association has arranged to coöperate closely with the A. PH. A. and the state associations and to give pharmacists a definite and helpful place in the program to wipe out these scourges (see page 211). A Joint Committee has been appointed to bring about the coöperation desired.

At the Second Session held on Thursday forenoon, informative reports for the membership about U. S. P. and N. F. revision

by Chairman Cook and Chairman Powers, who are chairmen of the respective committees of revision, were read. Great improvement is being made in the continuous revision of both books of standards and toward keeping them right up to date with the progress in medicine and pharmacy.

Dr. Harry N. Holmes, Oberlin College, Oberlin, Ohio, delivered an interesting, amusing and informative address on "New Vitamin Discoveries," during which he told about the vitamins and their effects in non-technical language. The address will soon be in print and will be of value to every pharmacist.

At the closing session, the Ebert and Kilmer Prizes were awarded, the new officers were installed and President Evans delivered his inaugural address, announcing his program. In it President Evans emphasizes the basic place of the retail pharmacist in the profession and the necessity of interesting him more deeply in its work. It is proposed to make this the outstanding feature of the program during the coming year. Several methods were suggested by President Evans and it is hoped to see a large increase in membership and in interest before the next annual meeting. The new President owns and successfully operates two pharmacies in a comparatively small town and knows by experience and contacts the interests and needs of retail pharmacists.

The House of Delegates

The House held three busy and well-attended sessions during the meeting. The reports of the officers and of the twenty committees of the ASSOCIATION, as submitted, furnished the voting delegates, of which the majority represent the state associations, with a comprehensive review of the many activities being carried on for the benefit of the pharmacists of the country. The House also either elected or nominated the officers of the ASSOCIATION, selected the place of meeting and approved the thirty-two resolutions which were later adopted by the ASSOCIATION. Food and Drug legislation, the modernization of pharmacy laws, interprofessional relations, continua-

tion courses for pharmacists and the resolutions brought out the most discussion.

The Council

Four sessions were devoted to the work of this group, one occupying a full day. The funds, finances, property and publications of the ASSOCIATION were given consideration.

National Formulary.—The completed manuscript for the National Formulary VII was submitted and the necessary arrangements for its publication will now be undertaken. Arrangements were made to transfer the officers of the National Formulary to the headquarters Building in Washington and to increase the personnel and equipment for its revision.

The A. Ph. A. Laboratory.—The rules governing the staff and personnel of the Laboratory and the duties of the Committee on Laboratory were revised in the light of the experience gained and the fact that the Director is now located in the Building. The conditions under which the Committee on Research recommends awards were also revised in order to secure wider distribution of awards and to bring them into closer coöperation with the Laboratory program.

Hugh Mercer Apothecary Shop.—Representatives of the Citizens Guild, which some years ago bought and restored this apothecary shop, which was owned and operated by Gen. Hugh Mercer, and in which General Washington maintained an office for many years while residing in Fredericksburg prior to the Revolutionary War, offered to deed the shop and its contents to the ASSOCIATION in fee simple in order to assure its permanent preservation. The offer is a great compliment to the ASSOCIATION and would place in its keeping one of the oldest apothecaries in this country as well as a shrine because of its association with Generals Washington and Mercer and other prominent people of that time. A committee was named to investigate the proposal and to submit recommendations.

Recipe Book.—The revision of this publication is being carried on continuously by

a committee of twenty-five experienced workers under the direction of Chairman J. Leon Lascoff. It is planned to include many additional formulas and several new divisions in the next revision and to make it a more useful book for the practicing pharmacists.

The Journal.—The experience gained in issuing the JOURNAL in two editions, the Scientific Edition and the Practical Pharmacy Edition, since January first, were carefully studied and arrangements made to improve both editions. Both editions seem to serve their respective purposes and both appear to have had a favorable reception.

The Practical Pharmacy Edition was referred to generally as representing the most important step recently taken by the ASSOCIATION to strengthen its contacts with the state associations and their members.

The Committee on Publications was requested to study the needs of both and particularly the need for additional personnel for the Practical Pharmacy Edition in order to relieve the Secretary from part of his extra duties in this connection.

American Council on Pharmaceutical Education.—The activities of the Council were carefully reviewed and arrangements made to continue the support of the A. PH. A., financial and otherwise. Dr. R. P. Fischelis was elected as a member of the Council for a term of six years.

Dues for Student Members

Upon recommendation of the Committee on Local and Student Branches the annual dues for members of Student Branches were reduced from \$5.00 to \$3.00 with the object of bringing a larger number of students of pharmacy into the ASSOCIATION.

The Sections and Conferences

About two hundred addresses, papers and reports were submitted during the sessions of the eight sections and conferences. These dealt with almost every phase of pharmacy: scientific, professional and economic. Many of them are of direct value to retail pharmacists and these will appear from time to time in the Practical

Pharmacy Edition. Those of a more scientific character will continue to be printed in the Scientific Edition together with pharmaceutical abstracts.

It is necessary for several sections to meet at one time but the arrangement to show in each of them what papers, etc., are being considered in the others is helpful in hearing the particular papers, etc., in which one is particularly interested. The papers are being more carefully selected each year and they represent one of the most important activities of the ASSOCIATION.

The Conference of Professional Pharmacists

This newest division of the ASSOCIATION created a great deal of interest and drew the sharpest criticism. Its meeting was crowded and the debate was heated at times. Several interesting papers were read, one of them reported a recent survey of dispensing by physicians in Wisconsin. The proposal to establish the American College of Apothecaries as a service organization for those pharmacies mainly devoted to professional activities and membership in which would be eligible to pharmacists owning or operating drug stores complying with certain standards, brought support and opposition. The proposal, after modifications were made in the light of the discussion, was referred to the Council and will be carefully studied. It was agreed by both proponents and opponents that no attempt at the classification of drug stores was intended but rather an effort to raise their standards.

Entertainment Program

The entertainment features were well arranged and were greatly enjoyed. They were in keeping with Richmond's reputation as a city of friendship and hospitality. Probably the outstanding feature was the banquet on Wednesday evening with almost seven hundred people at the tables. Senator Harry F. Byrd's speech was one of the high lights of the entire meeting and his opening remarks about pharmacy were very encouraging. Congressman David Salterfield introduced the Senator and the

fact that these two busy men came down from Washington for this occasion was very complimentary to the group as was Governor Price's visit during the session of the House of Delegates on Wednesday.

Exhibits

The Conference of State Committees on U. S. P.-N. F. Promotion has arranged for an exhibit of the work done in the states at recent annual meetings. The exhibit at Richmond was the most extensive and in-

teresting so far held. The space available and the location in the spacious lobby made this exhibit an attractive feature of the meeting. Several exhibits of thermometers, containers and packaging for the prescription laboratory were also included.

Taken altogether, the meeting was a very successful one and real progress was made. The attendance and the activities indicate the growing interest in professional pharmacy all over the country and the importance of the problems the profession now faces.—E. F. K.

United States Pharmacopoeial Convention Washington, D. C., May 13th, 14th and 15th

The thirteenth decennial meeting of this Convention since the U. S. P. was established in 1820, was attended by about 500 delegates representing medical schools, pharmacy schools, state medical societies, state pharmaceutical associations, a number of national organizations and certain governmental divisions. Practically every state in the Union was represented and in view of the preconvention publicity the interest in the proceedings was very high. The program of the meeting was printed in full in the April issue of this Edition.

Preliminary Sessions

For the first time, a number of section meetings were arranged for Monday, May 13th, and scientific subjects relating to pharmacopoeial revision were considered. The sessions were presided over by subcommittee chairmen and, judging from the attendance, they were successful.

Opening Session

The meeting of the Convention opened on Tuesday morning and the session occupied the entire day with a recess for lunch. After the roll call, President Walter A. Bastedo read his address. A review of pharmacopoeial affiliations followed. Dr. Morris Fishbein, of the American Medical Association, Dr. E. F. Kelly of the AMERICAN PHARMACEUTICAL ASSOCIATION and Mr.

W. G. Campbell of the Food and Drug Administration delivered addresses on the relation of the Pharmacopoeia to their respective groups. Special committees were named to consider the President's address and the other three addresses and later it was voted to refer the recommendations in most instances to the Committee on Constitution and By-Laws.

The delegates stood in silent memory to those former delegates and officers who have passed away since 1930 when the last meeting was held.

Reports of Officers and Board of Trustees

The reports of the Board of Trustees, the Treasurer and the Secretary of the Convention and of the Chairman of the Committee of Revision were received. In the latter report it was recommended that as soon as possible a permanent headquarters for the Pharmacopoeia should be established independently in Washington under the direction of a full-time Executive Assistant to the Chairman of the Committee of Revision.

Proposed Amendments

Several amendments to the Constitution and By-Laws which had been published in advance were then acted upon. These were adopted with a few changes. The principal amendments were: to limit each delegation

to one vote which was intended to give more nearly equal representation to organizations which, because of distance or other cause, could not send three delegates; that a second revision of the Pharmacopœia can be issued in any decade on recommendation of the Committee on Revision and the Board of Trustees; that amendments other than those submitted in advance by the Board of Trustees may be introduced during the first session; and that five members of the Committee of Revision may be chosen outside of the delegates to the Convention.

Proposed Reorganization of the Convention

It was generally recognized that the Constitution and By-Laws should be thoroughly studied and revised in the light of present conditions. Special emphasis was placed on the evident necessity to modify the present basis of representation in order to prevent duplicate representation and to reduce the number of delegates. A Committee on Constitution and By-Laws was authorized, to consist of four physicians, four pharmacists and a representative of the Federal Government with the President of the Convention, the Secretary of the Convention and the Chairman of the Committee of Revision as *ex-officio* members. This committee is required to report in not less than two years to a called meeting of the Convention which is expected to make effective a modified Constitution and By-Laws. This is the first instance that a called meeting of the Convention has been authorized.

Committee on Nominations

Each delegation present names one member on this Committee which met Tuesday evening and held a lengthy session. C. Leonard O'Connell, Pittsburgh, Pa., was chosen as permanent Chairman. After nominating the officers of the Convention and the members of the Board of Trustees, the physicians present nominated seventeen members of the Committee of Revision and the pharmacists nominated thirty-three members of the Committee.

The Second Session

The reports of the committees appointed at the first session were received and acted

upon. The additional amendments to the Constitution and By-Laws introduced at the first session were then acted upon upon recommendation of the Board of Trustees. A statement of policies and proposals submitted on behalf of several delegations was referred to the Board of Trustees. It was proposed to hold a meeting of the Convention each five years and to issue the Pharmacopœia each three years; that authentic therapeutic information be supplied with regard to the remedies listed in the U. S. P. for the information of physician and pharmacist and for guidance in the proper labeling of drugs and medicines; to strengthen coöperation with the Committee on National Formulary; to issue a detailed annual financial statement; and to provide adequate control over the use of any part of the text of U. S. P. in text and reference books.

Election of Officers

The report of the Committee on Nominations was accepted and the Secretary was directed to cast the ballot for the election of the nominees, as follows:

President: C. W. Edmunds, Mich.

Vice-Presidents: H. A. B. Dunning, Md.; Carey W. Eggleston, N. Y.; G. A. Moulton, N. H.; H. C. Wood, Pa.; R. C. Wilson, Ga.

Secretary: L. E. Warren, D. C.; *Assistant Secretary,* F. A. Delgado, D. C.

Treasurer: W. Paul Briggs, D. C.

Board of Trustees: E. F. Kelly, D. C.; Robert L. Swain, N. Y.; Ernest Little, N. J.; Morris Fishbein, Ill.; Walter A. Bastedo, N. Y.

Committee of Revision

Pharmaceutical: George D. Beal, Pa.; F. E. Bibbins, Ind.; J. B. Burt, Nebr.; C. W. Chapman, Md.; B. V. Christensen, Ohio; E. F. Cook, Pa.; A. G. DuMez, Md.; R. P. Fischelis, N. J.; P. A. Foote, Fla.; J. J. Goodrich, Wash.; L. E. Harris, Okla.; M. L. Jacobs, N. C.; G. L. Jenkins, Minn.; C. B. Jordan, Ind.; J. C. Krantz, Jr., Md.; H. A. Langenhan, Wash.; J. L. Lascoff, N. Y.; C. O. Lee, Ind.; A. B. Lemon, N. Y.; H. C. Muldoon, Pa.; E. L. Newcomb, N. Y.; C. L. O'Connell, Pa.; J. L. Powers, D. C.;

J. A. Reese, Va.; L. W. Richards, Mont.; G. W. Schicks, N. J.; C. L. A. Schmidt, Calif.; A. J. Schwartz, Tenn.; L. A. Seltzer, Mich.; F. O. Taylor, Mich.; E. H. Wirth, Ill.; H. W. Youngken, Mass.; L. C. Zopf, Ia.

Medical: H. G. Barbour, Conn.; W. A. Bastedo, N. Y.; Charles L. Brown, Pa.; W. B. Castle, Mass.; Arthur C. DeGraff, N. Y.; M. S. Dooley, N. Y.; C. A. Dragstedt, Ill.; Harry Gold, N. Y.; Thomas J. Hill, O.; Perrin H. Long, Md.; E. K. Marshall, Jr., Md.; G. W. McCoy, La.; W. L. Mendenhall, Mass.; E. E. Nelson, Mich.; Virgil E. Simpson, Ky.; Isaac Starr, Pa.; Soma Weiss, Mass.

Later, E. Fullerton Cook was elected *Chairman of the Committee of Revision*, Virgil E. Simpson and George D. Beal as Vice-Chairmen and John C. Krantz, Jr., as Secretary. A sub-committee on deterioration and storage was proved for.

The Board of Trustees elected E. F.

Kelly as Chairman, Walter A. Bastedo as Vice-Chairman and Adley B. Nichols as Secretary to the Board, the latter to act until the meeting to be held in September.

Dr. James H. Beal retired as Chairman of the Board of Trustees and Dr. S. L. Hilton as Treasurer of the Convention after thirty years of service in these important offices. Resolutions commending these officers for their efficient and faithful services were adopted.

General Principles

Before adjournment, six general principles in preparing the next revision were adopted on recommendation of the Committee of Revision.

It was the general opinion that this was a constructive meeting and that the steps taken will make the Pharmacopœia a more useful book to the physicians, the pharmacists and other interested groups, as well as to the public.

Reorganization Plan No. 4

As a result of the approval of the plan the Food and Drug Administration will be transferred to the Federal Security Agency, and the shift will become effective June 10th provided Congress does not adjourn prior to that date. If adjournment takes place before June 10th the change will be held up until sixty days after the next session of Congress convenes. The entire Food and Drug Administration, with the exception of two functions intimately related to agriculture, will be transferred to the Federal Security Agency where it is expected to cooperate closely with the U. S. Public Health Service in the protection of the consumer.

Donations. Mr. Turner F. Currens, of New York City, recently presented the Museum, AMERICAN INSTITUTE OF PHARMACY, with an old decorated porcelain mortar and pestle, brought from South America.

The New York County Pharmacetical Society, at a meeting held at the Hotel Empire, May 15th, elected the following officers for 1940-1941: *President*, F. D. Lascoff; *First Vice-President*, Arthur Bauer; *Second Vice-President*, Calvin Berger; *Secretary*, E. T. Mazilauskas; *Treasurer*, J. E. Thomas.

Resolution—Minnesota

"4. WHEREAS, the Minnesota State Pharmaceutical Association in convention assembled does hereby resolve that a letter of commendation be sent to the A. PH. A. for their new Practical Pharmacy Edition of the JOURNAL which is being sent to all dues-paid members of the State Association."

The 29th Annual Meeting of the American Drug Manufacturers Association was held in White Sulphur Springs, W. Va., May 6th to 9th. Attendance was unusually good. S. DeWitt Clough was reelected as president and John G. Searle as vice-president. In his address Mr. Clough stressed the importance of the new Federal Food, Drug and Cosmetic Law, the Pharmacopœial Revision, Legislative Movements, etc.

The Most Difficult Job

"Faire une bonne pomade, est faire une oeuvre d'art la plus difficile peut-être, qu'un praticien soit appelle' à accomplir." (To make a good ointment is a work of art, perhaps the most difficult task which the pharmacist is called upon to undertake.)—Quoted from an old source by A. T. Dalsgaard in a book review in *Arch. Pharm. og Chemi*, 46 (1939), 677.—Courtesy of C. S. Leonard.

Resolutions Adopted by the American Pharmaceutical Association at its Eighty-Eighth Annual Meeting in Richmond, Va., May 5th to 11th, 1940, Upon Recommendation of the House of Delegates Through the Committee on Resolutions

No. 1. Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION expresses its deep appreciation and admiration for the thorough and constructive review of pharmaceutical activities embodied in President DuMez's address. We commend in particular the inauguration of a long-range program of policy for the ASSOCIATION.

No. 2. Resolved, that the Committee on Long Range Program of Policy be made a standing committee and that it be enlarged if deemed advisable.

No. 3. Resolved, that the Committee on Long Range Program of Policy be directed to study and report on the following four disturbing conditions referred to in President DuMez's address as menacing the future development of pharmacy along professional lines.

(1) The growing tendency on the part of some physicians to instruct their patients to purchase drugs and medicines ordered over the counter instead of writing prescriptions for them.

(2) The increase in the dispensing of drugs and medicines by physicians and members of the other health professions in certain localities.

(3) The increase in the distribution of drugs and medicines through other than the established agencies which were intended by the framers of the State Pharmacy Laws to perform this important health service.

(4) The growing tendency on the part of some pharmaceutical manufacturers to offer for sale as specialties combinations of official drugs for dispensing as such when such combinations should be prescribed on the basis of the needs of the individual patient and be compounded and dispensed by pharmacists.

No. 4. Resolved, that the ASSOCIATION continue its efforts to bring about closer cooperation between pharmacy and medicine and the other health professions through strengthening the contacts which it has already made and by taking advantage of such opportunities as may develop to make new contacts

No. 5. Resolved, that a special committee be appointed by the Council to study the possibilities of developing educational and professional exhibits as a feature of our annual meetings and at national and state meetings of the other health professions.

No. 6. Resolved, that the ASSOCIATION continue its support, financial and otherwise of the American Council on Pharmaceutical Education.

No. 7. Resolved, that the Committee on United States Pharmacopoeia be requested to render periodic reports on the progress of pharmacopoeial

revision and that these reports be published in the Practical Pharmacy Edition of the JOURNAL.

No. 8. Resolved, that the Committee on State Food and Drug Legislation be instructed to study the Federal Food, Drug and Cosmetic Act and the regulations issued thereunder and to report its interpretations of the same periodically for publication in the Practical Pharmacy Edition of the JOURNAL.

No. 9. Resolved, that organizations of special professional groups in pharmacy now in existence, or the formation of which is contemplated now or in the future, be invited to consult with the AMERICAN PHARMACEUTICAL ASSOCIATION as to the advisability or necessity of forming such organizations. Desirable organizations shall be invited and urged to affiliate with the AMERICAN PHARMACEUTICAL ASSOCIATION.

No. 10. Resolved, that immediate provision be made to provide an adequate personnel to discharge the additional duties incident to the publication of the Practical Pharmacy Edition of the JOURNAL and to relieve the Secretary of some of the publication work which he is now carrying.

No. 11. Resolved that the Committee on State Food and Drug Legislation be requested to study the responsibility of pharmacy under the Food, Drug and Cosmetic Act, for the purpose of giving guidance and direction to the changes which are likely to come about in the distribution of drugs and cosmetics, and to study the changes in consumer buying habits of drugs and cosmetics insofar as these may effect the functions and operations of retail pharmacists.

No. 12. WHEREAS, it is the policy of the Federal Food and Drug Administration and a requirement of a number of State Food and Drug Laws that the mention of disease names on labeling of drug products shall be avoided, and

WHEREAS, the mention of disease names on such labeling tends to encourage self-diagnosis either directly or by inference, be it

Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION hereby requests the Food and Drug Administration also to cause the elimination of disease names from warning notices required on the labeling of drugs under the Federal Food, Drug and Cosmetic Act.

No. 13. Resolved, that state and national pharmaceutical associations be urged to renew their efforts to obtain legislation designed to limit the production and distribution of drugs and medicines to registered outlets by registered pharmacists.

No. 14. Resolved, that the U. S. P. Convention be requested to arrange for the inclusion of informa-

tion in the monographs of subsequent revisions of the Pharmacopœia which will assist in the proper labeling of drugs.

No. 15. Resolved, that the U. S. P. Convention be requested to arrange for the inclusion of information in the monographs of subsequent revisions of the Pharmacopœia on the proper packaging and preservation and storage of all drugs requiring special provisions of this character, such information to include time limits as to the probable effectiveness of certain drugs and preparations under specified packaging and preservation requirements, and to give serious consideration to the advisability of appointing a special sub-committee of the Committee of Revision to be known as the Sub-Committee on Packaging and Storage Requirements.

No. 16. Resolved, that the U. S. P. Convention be requested to arrange for the inclusion of as many synonyms as are in common use under the monographs of each drug or preparation admitted to the U. S. P.

No. 17. Resolved, that the U. S. P. Convention be requested to study and decide upon nomenclature and simplification of nomenclature for tests, descriptions, dosage and other factors, from the standpoint of drug law enforcement.

No. 18. WHEREAS, Dr. Samuel L. Hilton has completed his present term of service as a member of the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION and requested that his name be not considered for reelection to the Council, be it

Resolved, that the thanks and appreciation of the AMERICAN PHARMACEUTICAL ASSOCIATION be expressed to Dr. Samuel L. Hilton, of Washington, D. C., for his many years of tireless and outstanding service to the ASSOCIATION, as a member, committee worker, officer, President and Chairman of the Council. His faithfulness in discharging the many duties assigned to him in contacting Governmental Departments and appearing before committees of Congress, and the many hours he spent in watching over details connected with the construction of the Headquarters Building have earned him the special gratitude of members of our ASSOCIATION.

No. 19. Resolved, that beginning with the next ASSOCIATION year, July 1, 1940, the annual dues for members of the student branches be reduced to three dollars with a rebate of one dollar for expenses of the Branch; and

Resolved, that the by-laws of the ASSOCIATION be amended so as to permit such a reduction of student branch membership dues.

No. 20. This body expresses its deep appreciation for the capable manner in which Chairman M. N. Ford has conducted the affairs of the House of Delegates during his term of administration and for the thorough and effective plan of conducting our meeting as outlined in his address.

Resolved, that future meetings of the House of Delegates be held under the same general procedure as described in that address and carried out at this meeting.

No. 21. WHEREAS, ethyl alcohol is an essential ingredient of many drugs and medicines, and

WHEREAS, this product when purchased under the present excise tax adds materially to the cost of medical care, be it

Resolved, that the Federal and State governments be urged to remove any excise tax from ethyl alcohol used in medicinal products and that suitable and effective measures be promulgated to prevent the misuse of such tax-free alcohol.

No. 22. Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION again endorse the movement for the issuance of a special commemorative pharmacy postage stamp.

No. 23. WHEREAS, the AMERICAN PHARMACEUTICAL ASSOCIATION has frequently recorded its interest and extended its coöperation to other societies and governmental departments in the promotion of the public health, and

WHEREAS, the problem of venereal disease control is the subject of particular emphasis by the Federal and State health authorities at this time, be it

Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION extend its coöperation to the American Social Hygiene Association in its campaign against the spread of venereal disease; and

Resolved, that the appointment of a joint committee of the American Social Hygiene Association and the AMERICAN PHARMACEUTICAL ASSOCIATION to further coöperation between physicians and pharmacists of the United States in venereal disease control be approved; and

Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION recommend to the respective state pharmaceutical associations the appointment of state committees to coöperate with the joint committee of the American Social Hygiene Association and the AMERICAN PHARMACEUTICAL ASSOCIATION and with local, state and municipal groups such as social hygiene societies, Boards of Health and others in promoting the objective of better control of venereal disease.

No. 24. Resolved, that the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION be requested to include a survey of prescription prices in any survey of prescription ingredients which may be undertaken in connection with the forthcoming revision of the National Formulary.

No. 25. Resolved, that steps be taken to change the name of the Section on Practical Pharmacy and Dispensing to the Section on Practical Pharmacy.

No. 26. Resolved, that in view of existing agitation and a real need for a unified organization of hospital pharmacists that will permit the recognition and expression of their many specialized professional

practices, it is recommended that the following suggestions of the chairman be forwarded to the Council, namely:

(1) That the Sub-Section on Hospital Pharmacy be abandoned as such and that a National Association be substituted recruiting its membership from the active rolls of the AMERICAN PHARMACEUTICAL ASSOCIATION and that it shall be allowed a delegate to the House of Delegates of the AMERICAN PHARMACEUTICAL ASSOCIATION.

(2) That State or Regional Hospital Pharmacists Associations be allowed or required to affiliate with the NATIONAL ASSOCIATION. That same presumptions with regard to membership in parent associations should obtain in these Regional Associations. Such regional associations should be allowed or required to send delegates to annual meetings.

(3) That organization and representation of local associations should be provided for upon same relative basis as allowed Regional Associations with representation at state meetings.

(4) That some formula be provided for remitting a share of whatever dues may be paid the parent organization, the AMERICAN PHARMACEUTICAL ASSOCIATION, for the purpose of carrying on the work of the proposed National Association. It is also recommended that the columns of the Practical Pharmacy Edition of the JOURNAL be opened to members of the NATIONAL ASSOCIATION.

(5) Providing such a plan is not feasible at the present time it is recommended that the Council formulate some other plan to give an outlet within the AMERICAN PHARMACEUTICAL ASSOCIATION to the rapidly growing state and local Hospital Pharmacists groups throughout the United States.

No. 27. Resolved, that the President of the AMERICAN PHARMACEUTICAL ASSOCIATION appoint the Committee on Press Relations for a period of three years instead of annually and empower the chairman of the committee with the right to demand for publicity purposes copies of all papers at least one month in advance of the annual meeting.

No. 28. Resolved, that the President of the AMERICAN PHARMACEUTICAL ASSOCIATION appoint the chairman of the Committee on Dental pharmacy for a period of three years instead of annually.

No. 29. WHEREAS, the AMERICAN PHARMACEUTICAL ASSOCIATION is a national organization which represents professional pharmacy in all its branches, be it

Resolved, that the AMERICAN PHARMACEUTICAL ASSOCIATION refrain from endorsing at this time any movement to classify pharmacies or pharmacists as to their professional rank.

No. 30. Resolved, that the thanks of the AMERICAN PHARMACEUTICAL ASSOCIATION are hereby extended to the U. S. Office of Education, Radio Division and to the Smithsonian Institution for the inclusion of "American Pharmacy" as a subject in the World Is Yours nation-wide broadcast on March 24, 1940, and for supplementing this broadcast by a specially prepared booklet bearing the title, "American Pharmacy—First Line of Defense Against Disease," both of which will serve to bring the public health services of pharmacists to the attention of the American people.

No. 31. Resolved, that we recognize and appreciate the efficiency with which the Jefferson Hotel has handled the many details involved in the convention activities.

No. 32. Resolved, that we gratefully acknowledge the splendid work of the local committee of the Richmond Retail Druggists' Association in making this, the 88th annual meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION, a most happy and successful one. We have been particularly impressed with the capable management of the Local Secretary, Mr. L. C. Bird, and the work of the committees on public relations, transportation and information, and the committee on registration. The entertainment program was well planned and is appreciated. We are deeply grateful to the Governor of Virginia and other officials for their interest, co-operation and hospitality. Officials, citizens, organizations, institutions and industries of Richmond have coöperated in a most unusual way toward making this meeting a success. Historic Richmond has, in all respects, lived up to its reputation as an exponent of true Southern Hospitality.

Dean L. D. Havenhill, Kansas University School of Pharmacy, will resign his position at the close of the school year due to continued ill health brought about by an automobile accident. However, he is gradually improving and expects to be fully recovered in time. The shock of Dean Havenhill's resignation was lessened by the fact that he expects to continue teaching and doing research work. He has been dean since 1926, but has been connected with the School for forty years. A banquet, in his honor, was held on May 23rd.

The Florida State Pharmacacutical Association met in Tampa, on May 21st to 23rd. This was the 53rd annual convention. Among the speakers were: Nathan Mayo, "Pure Food and Drug Act;" Frank G. Dunn, of the United States Social Security Board; Dave Hearington, District Supervisor, U. S. Alcohol Tax Unit; Dr. P. A. Foote; Frank Coniglio; C. G. Hamilton and Dr. Robert L. Swain, editor of *Drug Topics*; S. F. Harris made the presidential address. The convention was most interesting and helpful.

Installation Address President Charles Hall Evans, Richmond Virginia, May 11, 1940

I am happy that historic Richmond, in old Virginia, was chosen as the meeting-place for the 88th Annual Convention of the A. PH. A. As we conclude this session and unfold our plans for the future, may we have caught the inspiration that has permeated the very souls of the people of this great state since the early days of its founding. May we realize that just as did Richmond and Virginia possess the courage to rise above wars and tribulations, so shall we, in this ASSOCIATION overcome the obstacles that are in our path. May we possess this same courage, and have the determination to build always for the future, never forgetting the heritage of the past. With this as our inspiration, with a will to be of service to our fellowmen, and a strength of character that is unfailing, we shall place pharmacy as a profession on a lofty pinnacle in the minds of the American people.

I want to thank Chairman Bird and his staff of co-workers for the many courtesies shown Mrs. Evans and myself during the week. The members of all committees, the hotel and in fact everyone has contributed to our comfort and pleasure in a splendid way and true southern hospitality was never more in evidence than it has been during these days that have passed all too quickly.

Objectives

It has been the custom, I believe, for the president to outline his program upon the occasion of his installation into office. In presenting my plans to you to-day, I realize that none of them is new, but on the other hand, they have been presented from year to year by other presidents and committee chairmen. I find after careful study that the objectives as set forth in the constitution are as applicable to-day as they were when first promulgated. Like the Ten Commandments, and a great many famous documents that have come down through the years, I find little need for modernizing or streamlining the objectives as given us by the wise and far-sighted founders of American pharmacy. However, I do see the

need, and I think it is high time something was being done to carry out the intent of these self-same objectives.

With the committee on Long Range Program and the officers and council, the necessary machinery has already been set up to do the job. I shall dwell only briefly upon the needs of the ASSOCIATION. These have been enumerated year after year. I shall attempt to point out means whereby the machinery may be set in motion to solve the problems that have been presented from time to time by those presidents who have preceded me.

Problems

The greatest problem confronting us is to sell the A. PH. A. to the retail pharmacists of America. I use the word "sell" purposely and advisedly as it correctly expresses this major problem as I see it. We have 130,000 pharmacists operating 60,000 retail drug stores and the majority of these stores are manned by one pharmacist and perhaps a clerk. This pharmacist is usually the owner or manager of the store. Most of these owners do not have the time or they will not take the time to attend their state or national meetings. They do not have the time, or will not take the time, to even read the drug periodicals which they receive without cost to themselves. Their chief source of information of a professional or commercial nature is through the representatives of the manufacturers or jobbers. The A. PH. A. must go directly to these stores which make up pharmacy as other professions and the American public knows it; and in selling the A. PH. A. to retail pharmacists this ASSOCIATION will in turn be selling pharmacy to the public. We can never take our rightful place, in a dignified manner, as a profession in the minds of the people, and our place in the expanding Public Health Program until the retail stores of America present pharmacy in a different light than that which is representative of the smaller stores and the chain stores of our country. The American public thinks on pharmacy

not as the mighty manufacturing plants with mass production and splendidly equipped scientific and research laboratories, not in terms of higher standards of pharmaceutical education, not in the same manner as other professions carrying on our great Public Health Program; but the American public thinks of pharmacy as it exists, in these thousands of smaller stores in every town and hamlet in our country.

I know some of you are saying, "This isn't a problem of the A. PH. A. This is a problem for the commercial associations. We are a dignified body concerned only with the scientific, educational and professional side of pharmacy." This is my answer. This condition as I have outlined it is American pharmacy of 1940, not eighty-eight years ago, not eight years ago; but to-day, this very minute in all the "corner drug stores" of these United States. This ASSOCIATION has long been referred to as the Mother of American pharmacy. This is your child, you have disowned it too long. The place to begin working is at the bottom, not at the top. It thus behooves every member, regardless of group affiliations, whether he be pharmacist, teacher, board member, jobber, manufacturer, et cetera, to work together to bring about better conditions in this the most vital need of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Suggestions

In undertaking this work I suggest that:

(1) The Council make it possible for a contact man and committee of pharmacists in whom these retailers have explicit confidence, together with officers of the ASSOCIATION, to meet with every state and local association possible in the interest of selling the A. PH. A. to retail pharmacy.

(2) That each College of Pharmacy and Student Branch be visited and that a year's membership be given to its graduates who will subscribe to the principles as outlined in the Code of Ethics. Furnishing our JOURNALS to each student, thereby, while in a formative period, acquainting young pharmacists with association activities and keeping them abreast of the times. Thus rendering a service to Colleges of Pharmacy.

(3) That a joint State, A. PH. A. and N. A. R. D. membership be worked out along lines similar to the American Medical Association, thereby giving pharmacy a unified front, a commanding voice and a representative membership.

(4) That a framed Code of Ethics be presented without cost to each new member to acquaint him with the objectives of the ASSOCIATION and to lend a professional air to his store.

(5) That the new Practical Pharmacy Edition of the JOURNAL be made more in keeping with the needs of retail pharmacy. This Journal with the help of the A. PH. A. laboratory personnel can work out a uniform and helpful U. S. P. and N. F. Program tying in with similar state association work.

(6) That the new Journal furnish material to state association secretaries for bulletin service; this material to include educational, legislative and commercial matters in the interest of a coördinated program of state and national import.

(7) That the new Journal launch a nation-wide program of publicity through this state association set-up, through the daily press, magazines and periodicals, and in every available source on scientific, educational, legislative and news-interest relative to all phases of pharmacy and pharmacists in public life. For example; a complete coverage of the coming U. S. Pharmacopœial convention.

(8) That a Pharmaceutical Alliance composed of representatives of all branches of the drug industry be formed to coördinate efforts in all matters affecting the unit of pharmacy. I see no reason for additional associations. The need is for some one group to speak for a unified profession and to direct its destinies.

Now Is The Time

I believe this is the opportune time to begin this program. I think our leaders in the different branches of the drug industry realize the need for just such a program. If we are to keep pace with the rapid changes in science, education, legislation and merchandising, it is imperative that all branches of pharmacy from retailer to manufacturer

pool their efforts in presenting a unified front.

That this is important I quote from "The World is Yours" an article entitled "American Pharmacy," by Charles Whitebread, Associate Curator, Division of Medicine and Public Health, Smithsonian Institution, United States Office of Education. This is a preface to the NBC broadcast, Sunday P.M. March 24, 1940.... "The skill of the Manufacturing Pharmacist has played an important part in advancing pharmacy to its present high standards, but we must keep in mind the fact that most pharmaceutical advances have developed behind the prescription counter and in the laboratory of the corner drug store. Each of these major branches of pharmacy, the large manufacturing plant and the small corner drug store is essential to the other."

Your President is a typical small-town pharmacist operating two retail stores in a Georgia town of 1289 population. Having been actively engaged in the retail drug business for twenty-five years, in Fair Trade and association activities both state and national, and having made observations while attending the A. P. H. A. meetings for the past several years, he has had the opportunity to get a clear picture of conditions in retail stores from Texas to Canada and Oregon to Florida.

The backbone of American pharmacy is represented in these corner drug stores of our country. The A. P. H. A. is the one organization to inject that professional serum which is so greatly needed into the spine of pharmacy. As head of this ASSOCIATION I hold the needle; will you as members of the Council and members of this ASSOCIATION supply the serum?

Installation of Officers

The officers elected by mail ballot last fall and installed during the Richmond meeting are: Charles H. Evans, Warrenton, Ga., *President*; H. A. K. Whitney, Ann Arbor, Mich., *First Vice-President*; Henry Gregg, Jr., Minneapolis, Minn., *Second Vice-President*; F. J. Cermak, Cleveland, O.; H. A. B. Dunning, Baltimore, Md.; and C. B. Jordan, LaFayette, Ind., *Members of the Council*.

During the Richmond meeting the following officers were elected to serve during the year 1940-1941: William P. Porterfield, Fargo, N. Dak., *Honorary President*; E. F. Kelly, Washington, D. C., *Secretary*; C. W. Holton, Essex Fells, N. J., *Treasurer*; Hugo Schaefer, Brooklyn, N. Y., *Chairman* and Charles L. Guthrie, Petersburg, Va., *Vice-Chairman* of the House of Delegates.

The following were nominated during the recent Richmond meeting for the respective officers named and will be submitted by mail about October first to the members of the ASSOCIATION, with a ballot, for the election. Those elected will be installed

during the closing session of the 1941 meeting which will be held in Detroit, Mich.

President.—B. V. Christensen, Professor, University of Ohio, Columbus, O.; E. V. Lynn, Professor, Massachusetts College of Pharmacy, Boston, Mass.; H. C. Muldoon, Professor, Duquesne University, Pittsburgh, Pa.

First Vice-President.—Denny Brann, Retail Pharmacist, Des Moines, Iowa; S. H. Dretzka, Secretary, Wisconsin Board of Pharmacy, Milwaukee, Wis.; J. Lester Hayman, Secretary, West Virginia Pharmaceutical Association.

Second Vice-President.—A. B. Lemon, Professor, University of Buffalo, Buffalo, N. Y.; L. W. Rowe, Manufacturing Pharmacist, Detroit, Mich.; R. A. McDuffie, Retail Pharmacist, Greensboro, N. C.

Members of the Council.—F. E. Bibbins, Manufacturing Pharmacist, Indianapolis, Ind.; W. G. Crockett, Professor, Medical College of Virginia, Richmond, Va.; M. N. Ford, Secretary, Ohio Board of Pharmacy, Columbus, O.; Glenn L. Jenkins, Professor, University of Minne-

sota, Minneapolis, Minn.; P. H. Costello, Retail Pharmacist, Cooperstown, N. Dak.; R. A. Kuever, Professor, University of Iowa, Iowa City, Iowa; John E. O'Brien,

Retail Pharmacist, Omaha, Nebr.; R. L. Swain, Pharmaceutical Editor, New York City; Elmer H. Wirth, Professor, University of Illinois, Chicago, Ill.

National Dental Program

By G. C. Schicks, Chairman

If you have not participated in the National Dental Program it is not too late to start now. Review the previous articles starting with the January issue and send the formulas contained therein to the dentists you wish to detail. This program is a prescription service from the pharmacist to the dentist.

Prescription Comments

If you must have a mouthful of gritty powder, wouldn't you prefer it to have a pleasing color and taste? This is accomplished in the formula for dental abrasive paste. Pumice is used to clean teeth by the dentist—it is really a powder the dentist does use—but he does not recommend it for his patients to use. Adults as well as children appreciate the disguise which color and taste add to pumice. It should be the official flour or superfine pumice that is used. The quantity in the formula can be changed to suit the demands of the dentist.

Some dentists practice in neighborhoods where abrasive capsules would be especially appreciated. They are likewise colored and flavored. The dentist empties the contents of one or more capsules into a dappen dish (glass container) and adds a little water or glycerin to make a paste. The patient notices that the dentist does not dig it out of a jar used as a common source of supply, but that the abrasive used on his teeth comes in a sealed capsule—just for him.

When it becomes necessary to wear an artificial denture you want it to stay in place. Sometimes it doesn't—then a dental adhesive powder finds a friend. A dentist usually can make a denture "stick," but if temporary help is needed denture adhesive will answer a need. Food substances ad-

here to dentures. Most any tooth paste or powder applied with a brush will remove it. However, trisodium phosphate, which produces an alkaline solution, is a good solvent. If it is used according to directions in the formula it works well.

Diseased pulps are now frequently removed under local anesthesia. Arsenic was formerly widely used to devitalize the pulp, but the danger and pain from its use has caused it to lose favor. The formula for pulp devitalizing paste using paraformaldehyde is acceptable to many dentists.

Materials used in temporary cements are such common agents as zinc oxide, rosin and eugenol. Zinc oxide and eugenol are used as a temporary filling. Rosin and zinc oxide in combination are used for rebasing dentures and for so-called surgical packs. The latter is useful as a post-operative pack after surgical treatment of the gums in pyorrhea.

Zinc oxide with thymol is used as a pulp capping material. It is a protection for the pulp in deep cavities and aids in preventing shock from thermal changes. Zinc oxide for dental use should be at least U. S. P. grade; in other words, low in arsenic content.

Inquiries

Questions concerning dental medication will be given immediate attention through this column or by letter. If our committee can help with your dental problems, please do not hesitate to ask for information.

Prescriptions—Series IV

DENTAL ABRASIVE PASTE

(a) R	Metric Approx.	Apoth. Equivalents
Pulv. Pumice N. F.	24.0 Gm.	5 vi
Glycerite Starch	36.0 Gm.	5 ix

Methyl Salicylate	0.5 cc.	m. viii
Liq. Amaranth	1.0 cc.	m. xv

Office use. Agreeable taste and color. Disguises color of blood in prophylaxis. Stays under brush—does not throw from brush or teeth. Quantity of pumice may be increased or decreased as desired.

(b) ℞	Metric Approx.	Apoth. Equivalents
Pulv. Pumicis	1.3 Gm.	gr. xx
*Pulv. Amyli	0.24 Gm.	gr. iv
Methylis Salicylatis	0.06 cc.	m. i
Carmini	0.005 Gm.	gr. $\frac{1}{12}$

Make 12 such capsules.

Office use. Contents of one or more capsules as an abrasive. For the particular patient. Dentists' use only. Add a few drops of glycerin or water to powder after taking from capsule.

*Powdered starch.

DENTURE ADHESIVE

(c) ℞	Metric Approx.	Apoth. Equivalents
Pulv. Tragacanthi	22.5 Gm.	℥ vi
Pulv. Karaya Gum	7.5 Gm.	℥ ii
Oil Sassafras	0.5 cc.	m. viii

Sig: Sprinkle sparingly on denture before placing in mouth.

Note: Acacia may replace tragacanthi if desired.

DENTURE CLEANER

(d) ℞	Metric Approx.	Apoth. Equivalents
Trisodii Phosphatis	120.0 Gm.	℥ iv
Olei Cinnamomi	0.3 cc.	m. v
Liquor Amaranthi	2.1 cc.	℥ ss

Sig: Dissolve scant $\frac{1}{4}$ teaspoonful in full glass water and use with brush. Do not leave denture in solution over night.

Note: Cellulose acetate type denture is decomposed by alkaline substances. Formaldehyde and phenol formaldehyde type withstand most chemical substances.

PULP DEVITALIZING PASTE

(e) ℞	Metric Approx.	Apoth. Equivalents
Paraformaldehyde	1.0 Gm.	gr. xv
Procaine Base	0.3 Gm.	gr. v
Powdered Asbestos	0.5 Gm.	gr. viii
Petrolatum	1.25 Gm.	gr. xx
Carbaine	0.015 Gm.	gr. $\frac{1}{4}$

TEMPORARY CEMENTS

(f)

1. ℞

Zinc Oxide, U. S. P. and Eugenol—a convenient quantity to make a paste.

2. ℞

Zinc Oxide A. D. R.* and Eugenol—a convenient quantity to make a paste.

*Zinc Oxide as described in "Accepted Dental Remedies."

(g)

℞

Zinc Oxide 10.0 Gm.

Thymol 5.0 Gm.

M.

Melt thymol on a water-bath in a porcelain evaporating dish. Add the zinc oxide and rub to a smooth paste in a thin layer on the sides of the evaporating dish and cool. Remove with spatula.

Keep in well closed bottle.

For pulp capping.

(h)

℞

	Metric Approx.	Apoth. Equivalents
Powder		
Zinc Oxide A. D. R.	69.0 Gm.	℥ ii ℥ i gr. xlv
*White Rosin	29.3 Gm.	℥ vii gr. xxxii
Zinc Stearate		
Powder	1.0 Gm.	gr. xv
**Zinc Acetate	0.7 Gm.	gr. xi

Liquid

Eugenol	85.0 cc.	℥ ii ℥ vii
Olive Oil	15.0 cc.	℥ iv

*The presence of rosin is said to improve the physical properties of the finished cement.

**Zn(CH₃CO₂)₂·2H₂O. Setting accelerator. The proportion of this ingredient may be varied to produce the desired setting rate.

To prepare the powder, grind the rosin with successive portions of zinc oxide until all of it passes a 100-mesh screen. Grind the zinc acetate to pass a 200-mesh screen and mix all the ingredients together thoroughly.

The Hale Prescription Pharmacy
Lowell, Massachusetts
May 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell Massachusetts

DEAR DR. PERKINS:

The fourth series of dental prescriptions contains formulas for abrasive paste and powder, denture ad-

hesive, denture cleaner, pulp devitalizing paste, pulp capping material and temporary cements.

If you are using a plain abrasive, not colored or flavored, you will find the abrasive paste and powder very pleasing. Each preparation is colored a deep red so when it mixes with the saliva it appears blood color. Some persons having an aversion toward blood will appreciate this disguise. Children like the color and the "candy" taste.

The combination of gums used in the denture adhesive powder makes it possible for you to prescribe as efficient a denture adhesive as any on the market.

Trisodium phosphate is a common alkaline agent used in proprietary medication for cleaning dentures. It will prove a satisfactory preparation for this purpose if the directions on the prescription are followed.

Paraformaldehyde is used in paste form as a devitalizing agent. The pink color given the preparation will enable you to detect its presence if it is squeezed out while being sealed in.

The two pulp capping formulas are perhaps the ones most commonly used by the dental profession: Zinc oxide with eugenol to make a paste, or zinc oxide combined with thymol. The latter when properly prepared occurs in hard white pieces or plates. The zinc oxide-rosin preparation for surgical and temporary impression packs is now available to you through the drug store.

Call us in any emergency—Humboldt -5670

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

The Department of Agriculture has promulgated regulations under the Federal Food, Drug and Cosmetic Act further amending the regulations published in the Federal Register of May 9, 1939, which deal with the listing and certification of coal-tar colors. The public hearing upon which the revised regulations are based was held on March 11, 1940.

The amendments substitute the short title, "Coal-Tar Color Regulations," for the former title of these regulations and add two new coal-tar colors to the list of those found harmless and suitable for use in drugs and cosmetics. These colors, D&C Green No. 8 and D&C Red No. 39, have previously been known under the names "Pyranine Concentrated" and "Alba Red," respectively.

These amendments appear in the Federal Register of May 10, 1940, which can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents a copy.

The Minnesota State Pharmaceutical Association met, for the 56th time, in Minneapolis, April 8th to 10th, with an attendance of about 700. The three days were packed with education and entertainment. On the program were many outstanding speakers. It was decided to cease the printing of the proceedings of the convention in book form and, instead, a portion will be printed each month. Among the Resolutions passed was: "No. 4. WHEREAS, the Minnesota State Pharmaceutical Association in convention assembled does hereby resolve that a letter of commendation be sent to the A. Ph. A. for their new Practical Pharmacy Edition of the JOURNAL which is sent to all dues-paid members of the State Association."

Nebraska State Pharmaceutical Association met in Omaha, April 15th to 18th. Among the speakers were: William Pierce, "The Value of Scientific Operation;" Ralph Beegle, of the Cerophyl Company, "Merchandising;" and R. W. Ar-

noldy, McKesson-Robbins, Inc., "Where Do We Go from Here;" Edward Schuster, State Department of Vocational Education, "Distributive Education;" W. T. Allen, Owens-Illinois Glass Co., "Don't Pray to the Lord for Plentiful Crops and Expect Him to Do the Hoeing;" Dr. A. L. Omohundro, McKesson & Robbins, Inc., "The New Drug Law and Its Effects on Consumer Package Labeling;" Hon. Theodore Christianson, "Patman Chain Store License Bill;" Dr. Neal Bowman, Temple University, "How Customers Are Lost;" Keith K. Keller, "Controlling Retail Operation for Profit;" Walter Pearce, "Consumer Education and the Druggist;" Walter Quinlan, Jack Snowden, Charles Langwer-meyer and Dr. F. S. Bukey.

The Georgia State Pharmaceutical Association met for the 65th time in Valdosta, April 24th and 25th. The high light of the convention was an address by Hon. Theodore Christianson, Public Relations Counsel of the N. A. R. D. and formerly Governor of Minnesota; Dr. Bennett G. Owens, of Valdosta, presented problems of mutual interest to physician and pharmacist; and a Resolution demanding full representation upon boards, committees and agencies affecting public health was passed. John W. White of Thomasville was elected to the presidency; and R. C. Wilson and C. H. Evans were named as delegates to the A. Ph. A. and U. S. P. conventions.

Dr. Lloyd C. Miller, pharmacologist, Federal Food and Drug Administration, Washington, D. C., was awarded the Ebert Prize at the Richmond Convention of the A. Ph. A. The title of his paper was "The Assay of Digitalis."

Miss Barbara Gertrude Jacobs, student at the Massachusetts College of Pharmacy, Boston, Mass., won the Kilmer Prize. The title of her paper was, "A Pharmacognostic Study of Digitalis Ambigua." Presentation was also made in Richmond.

time of publication has not yet been announced but those who use the National Formulary may be assured that it will not be published without ample advance publicity.

Death of Dr. Fantus

The members of the committee were saddened by the death of Dr. Bernard Fantus of Chicago, a member of the committee, who has been intimately associated with National Formulary revision work since 1920. Resolutions expressing the appreciation of the committee for Dr. Fantus' work and sym-

pathy to his family were adopted. Several letters concerning Dr. Fantus from previous members of the National Formulary Committee were read and published in the National Formulary Circular.

The work in connection with the National Formulary revision will continue the same as it has during the past four years. It is hoped that it will be possible to issue more frequent revisions of the National Formulary in the future, thereby making it more useful as a legal standard and as a formulary for the practicing pharmacist.

A Less-Toxic Bitter Tonic*

By James C. Alunch and Harry J. Pratt

The use of quinine, gentian and other substances with a bitter taste as "tonics" dates back several centuries. U. S. P. XI, N. F. VI and R. B. II contain a number of preparations, in which quinine and strychnine are the bitter principles. In general the ratio of quinine to strychnine falls between 75:1 and 130:1, most of the products containing between 30 and 50 times as much quinine as strychnine. A number of deaths have been reported, particularly among children who took these mixtures in small pills by mistake. Since the symptoms show that these deaths were due to strychnine, we have conducted a series of investigations to produce an equally satisfactory "bitter tonic" which would be less poisonous.

Using the previous studies on the relative bitterness of strychnine and quinine, we have confirmed the results reported therein, that brucine is three times as bitter as strychnine. In a large number of toxicity studies, we have found that brucine is about one-fiftieth as toxic as strychnine, although the ratios vary from 1:15 to 1:90 in different animals and with different methods.

The bitterness threshold of quinine was 10 mg. per liter, of strychnine 2.25 mg. per liter and of brucine 0.8 mg. per liter. Brucine is three times as bitter as strychnine and twelve times as bitter as quinine. Since the usual ratios for quinine:strychnine fell be-

tween 30 and 50:1, quinine is the more important bitter in the mixture. (Quinine is one-fourth as bitter as strychnine, but thirty to fifty times as large an amount is present, making it eight to twelve times as potent in bitterness value.)

A series of elixirs has been prepared using various ratios of quinine:brucine. A ratio of 8 Gm. of quinine HCl to 0.05 Gm. of brucine sulfate (corresponding approximately to 6.5 Gm. of quinine:0.045 Gm. of brucine or 150:1) gave a solution essentially as bitter as the official Elixir I. Q. S.

We propose the following formula:

Elixir Ferri, Quininae et Brucine

Tincture of Ferric Citrochloride.....	125 cc.
Quinine hydrochloride.....	8 Gm.
Brucine sulfate.....	50 mg.
Compound Spirit of Orange.....	10 cc.
Alcohol.....	240 cc.
Glycerin.....	300 cc.
Distilled Water, q. s.....	1000 cc.

Average Dose 4 cc.

A ratio of one hundred and fifty parts of quinine to one part of brucine is equally effective in uncoated pill or tablet form. Since the chief value of this product is as a bitter, we do not favor retention of a coated tablet or pills.

Conclusion

A less-toxic bitter tonic has been prepared.

Ratio Quinine : Strychnine in N. F. VI Preparations

Products	Quinine—Gm.		Strychnine—Gm.		Ratio Strychnine as 1
	Salt	Alk.	Salt	Alk.	
Elix. glycerophos. co.	HCl—0.875	0.718	Nitr. 0.125	0.105	6.85
Syr. hypophos co.	.....	1.1	.....	0.10	11.0
Elix. ferr. quin. et strych. phos.	Phos. 5.0	3.8	Phos. 0.25	0.179	21.2
Pil. ferr. quin. strych. et arsen.	Sulf. 6.5	4.83	.....	0.13	37.0
Elix. ferr. quin. et strych.	HCl 8.0	6.56	Sulf. 0.175	0.137	48.0

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

6816 Market St., Upper Darby, Pa.

The Value of Analytical Chemistry to the Pharmacist

By Paul J. Jannke

Since the modern pharmacy student devotes many hours to the study of analytical chemistry, both pure and applied, he is entitled to ask, "What benefits do I derive from these courses?"

An interpretation of the term, analytical chemistry, cannot be limited to definitions of qualitative and quantitative analysis of purely chemical interest. It is true that qualitative analysis is that branch of chemistry treating with the composition of matter and the identification of the elements and groups of elements of which matter is composed. Likewise it is true that quantitative analysis is the determination of the quantity or amount of each element or group of elements present in a compound or a mixture. The value of these types of analyses is not at all as limited as it may appear to the casual observer. Since science consists not of a compilation of facts, but of generalizations based on these facts, it is apparent that the application of the fundamental principles of qualitative and quantitative analyses results in a host of specialized fields of study. Thus, the studies in plant chemistry, food chemistry, pharmaceutical assaying, incompatibilities, etc., are nothing more than adaptations of qualitative and quantitative processes which are made with a definite view in mind. These and many others fall into the general category of analytical chemistry.

Training in Chemistry Develops Accuracy

Success in carrying out analytical procedures is vitally dependent upon technique and upon the ability of the operator to follow directions explicitly. Technique in measuring and weighing properly and in filtering lays the foundation for accuracy in compounding and economy in dispensing. As a public health servant, the pharmacist must appreciate the value of cleanliness of glassware and neatness in manipulation. More pharmacists would be inclined to work behind open or semi-open prescription counters if they were more tidy in their

practices. Courses in prescription compounding are intended, in part, to teach the prospective pharmacist the correct method or methods of mixing the ingredients of a given prescription. Deviation from the proper course frequently results in prescriptions which are unfit for human consumption.

Incompatibilities are frequently the results of chemical reactions. A pharmacist who has at his command a sound knowledge of pure and applied analytical chemistry is one who can predict incompatibilities in prescriptions, even though he may not have had special training in a course of that type. The writer knows of several pharmacists who attempted to compound prescriptions calling for elixir of gold tribromide and codeine sulfate. Their waste of material proved costly. It is not unusual for the pharmacist to be called upon in emergencies to produce an antidote in the event of poisoning. His choice of treatment, pending the arrival of the physician, may well be governed by his knowledge of the reactivity of chemicals, or, in other words, qualitative chemistry. The attending physician will regard highly and recommend strongly the pharmacist who is mentally alert.

Analytical Chemistry Has Much Cash Value

It enables the pharmacist to make a wise choice between chemicals of different qualities. He is taught to interpret the *Pharmacopoeial* monographs to his greatest advantage. Herein is emphasized the identity, the quality, and the stability and proper storage of the raw materials he purchases. He receives practice in preparing standard solutions, test solutions and stains recognized in the *Pharmacopoeia* and the *National Formulary*. The sales of these solutions are lucrative indeed. The ever increasingly important question of hydrogen ion concentration is well explained in analytical chemical studies, thus enabling the pharmacist to confer intelligently with the

physician when the therapeutic value of pharmaceutical preparations is dependent upon hydrogen ion concentration.

Knowledge of analytical chemistry of physiological nature is of tremendous value to the pharmacist. The rural physician cannot turn to commercial laboratories for his urinalyses and blood tests, and the urban physician will not care to patronize these laboratories if and when he learns that his pharmacist is willing and qualified to carry out the tests. The layman as well as the physician is conscious of vitamins and hormones. To be able to speak intelligently to both men concerning these products is a distinct advantage evidenced by not only increased sales, but also by economical purchases.

Narcotic Mimeograph

The Office of Commissioner of Narcotics, Washington, D. C., has sent the following Registrants' Mimeograph No. 33, dated April 6, 1940, to manufacturers and wholesale dealers in narcotic drugs:

"It has come to the attention of this office that a number of manufacturers and wholesale dealers have misconstrued paragraph 3, article 15, of Regulations No. 5, to authorize the sale by retail dealers of stamped specialty ampoules and vials containing sterile narcotic solutions.

"The sale of such specialty ampoules or other packaged units, which are required to bear tax stamps, renders the seller liable to registration and payment of tax as a wholesale dealer in Class 2. A druggist registered only in Class 3, therefore, may not furnish such stamped units to physicians pursuant to order forms. The law and regulations contemplate, on the other hand, that the physician will procure his requirements of such items from the manufacturer or wholesale dealer and not from the retail druggist.

"Article 15, of Regulations No. 5, relates only to extemporaneous solutions prepared by the retail dealer himself. It is a provision for meeting the emergency requirements of physicians for such solutions and is simply an exception to the general rule that only manufacturers registered in Class 1 can compound or manufacture narcotic preparations, and has no application to the distribution of solutions prepared and packaged by regularly registered manufacturers."

Dr. W. F. Rudd, Dean of the School of Pharmacy, Medical College of Virginia, Richmond, made an address before the Virginia Academy of Science Conference at the Virginia Military Institute, Lexington, Va., on May 2nd. Dean Rudd is the President-Elect of the Academy.

Too frequently is the pharmacist regarded a specialist. He is a potential expert whose success depends upon willingness to apply himself. Trade schools develop potential experts. To be sure, much of the training of the pharmacist concerns specific fields, *e. g.*, prescription compounding, alkaloidal chemistry, etc., nevertheless the blending of these fields produces a most valuable way for him to become an expert. Specialization is frequently regarded the keynote to success, but it must be remembered that the specialist serves occasionally while the expert serves constantly. The pharmacist can and will serve constantly when he convinces his patrons and his prescribing physicians of his expertness.

Supplement to the List of Trade-Marks Registered with the American Drug Manufacturers Association and American Pharmaceutical Manufacturers Association

A supplement to the list of Trade-Marks Registered with the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association is now ready for distribution. The main list was released August 1, 1938, and the present supplement represents additions, corrections and deletions up to January 1, 1940.

The purpose of these lists is to furnish information in the preliminary consideration of new trade-marks. It is the desire of the associations that the booklets receive the widest possible circulation, not only among members, but among all others interested in this important field, including firms and individuals identified with allied organizations, trade-mark attorneys and association trade-mark bureaus.

The principal list was offered at \$2.00; the price of the supplement is fifty cents a copy. If the two publications are ordered together, they will be furnished for a total of \$2.50.

Copies may be obtained from Carson P. Frailey, Executive Vice President and Secretary, American Drug Manufacturers Association, 507 Albee Building, Washington, D. C. or from S. Barksdale Penick, Jr., Secretary, American Pharmaceutical Manufacturers Association, 132 Nassau Street, New York, N. Y. Check should be forwarded with order.

Dr. Louis Saalbach, Pittsburgh College of Pharmacy, University of Pittsburgh, was honored with an informal Testimonial Dinner by the graduating class on Wednesday evening, May first, at 6:30 p.m., Hotel Schenley.

Dentistry's First Hundred Years

By C. L. Whitman* and G. C. Schicks†

Ten years before there was a United States of America the colonies had their first recognized dental practitioner—Robert Woofendale. Arriving from England in 1766, he practiced dentistry in Philadelphia and New York. His training had been an apprenticeship under Thomas Berdmore, who was the dentist of George III. Previous to 1766 any dentistry practiced in this country was probably done by barber surgeons, for the Pilgrims in 1639 brought from London a few physicians, an apothecary and three barber surgeons. During the period of the Revolutionary War, 1775–1783, a number of dentists arrived in this country from foreign lands. Such names as Hunter, Berdmore, Watts, Fauchard and Bourdet are historically significant, for they were the teachers of those who wished to learn dentistry. In 1778 James Gardette, reported to be a French naval surgeon, practiced dentistry and surgery in LaFayette's army and gained considerable reputation. He was the first to substitute flat clasps for ligatures or wires in artificial work. He also substituted gold foil for lead in filling teeth.

Near the close of the war (1782) Gardette gave instruction to Josiah Flagg, who became the first native dentist in the United States. Flagg fastened loose teeth, transplanted teeth, and mended teeth with foil or gold, and proclaimed to do so without pain. He made artificial teeth and sewed harelips. Transplanting teeth, although no longer practiced, was pursued to some extent. Flagg also sold at wholesale and retail dentifrices, tinctures, chewsticks, masticks, teeth and gum brushes suitable for every age, complaint and climate, with directions for their use.

John Greenwood was another dentist who gained prominence and was chosen by General George Washington to serve as his dentist. In 1789 he extracted a tooth for Washington and later made him a complete set of artificial dentures.

The first of the noteworthy contributions to dental literature came from 1816–1824 by L. S. Parmly, Eleazar Parmly, J. Foster Flagg and Eleazar Sidney. Dental colleges had not as yet put in an appearance. The Medical College of Philadelphia was started in 1765 and the first college of pharmacy, the Philadelphia College of Pharmacy, in 1821. The first dental college was established in 1839 as the Baltimore College of Dental Surgery.

Credit is due especially to Dr. Horace H. Hayden and Dr. Chapin A. Harris for advocating and insisting on higher dental standards, for with Doctors Bond and Baxley they founded the Baltimore College of Dental Surgery. The charter was granted on February 1, 1840. In 1841 graduates from a one-

year course received the degree of "Chirurgiæ Dentium Doctor," translated as Doctor of Dental Surgery, or D.D.S.

Since that time dentistry has made tremendous advances, emerging from a mechanical trade to one of the major professions. Early dentistry was concerned with repair, extraction and replacement of teeth, whereas to-day the trend is toward preventive dentistry.

Dentists have played an important part in anesthesia. Dr. Horace Wells made one of the greatest contributions to humanity when he successfully demonstrated the use of nitrous oxide as a general anesthetic. Dr. Wells, while under its influence, had one of his perfectly good molars extracted by a fellow dentist on December 11, 1844. When he awoke he exclaimed, "A new era in tooth pulling. It did not hurt me as much as a prick of a pin. It is the greatest discovery ever made." About two years later a dentist, Dr. W. D. Morton, introduced to the medical profession the use of ether as an anesthetic, although a physician, Dr. C. W. Long, had used it about four years previously but had not publicized it.

Local anesthesia was first brought to the notice of the dental profession by Dr. H. S. Chase, Woodstock, Vermont, in 1850–1851. He dipped a piece of cotton into ether and placed it in the tooth cavity. A new method for use in controlling pain was introduced through the invention of the hypodermic needle in 1853. The value of cocaine was demonstrated in 1884 by Koller of Vienna. It was first used as a topical anesthetic, but before the close of the year 1884 it was injected to produce block or conductive anesthesia. Cocaine, being a habit-forming drug, produced undesirable reactions. A search was made to find a pain-controlling drug without the bad effects produced by cocaine. In 1906 Uhlfelder and Einhorn of Germany discovered a substitute for cocaine—a synthetic drug called novocaine. To-day novocaine, or procaine hydrochloride, is the most widely used drug in the dental profession to produce local anesthesia. Dentists spend about three million dollars a year for this drug item alone. The use of medication for pain has done much to relieve fear and bring comfort to the dental patient.

When the Baltimore College of Dental Surgery was started artificial dentures were carved from various substances such as hippopotamus tusks, wood and bone, or fashioned from various metals, with mineral teeth attached. The discovery of the Goodyear process of vulcanizing rubber brought about a change in these methods. Artificial plates of vulcanite were introduced, and it has remained the most widely preferred material for this purpose. The new methyl-methacrylic resins which have recently been introduced seem to be replacing vulcan-

* Trustee, New Jersey State Dental Society.

† Assistant Dean, Rutgers College of Pharmacy; Chairman Committee on Dental Pharmacy, A. P. H. A.

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Lead was probably the first material used for filling teeth. Harris says that gold was used in the early part of the eighteenth century, but it was not commonly used until about 1800. Lorenz Heister of Frankfurt-am-Main seems to be the first to mention the use of gold in a published treatise entitled "De Dentium Dolore" in 1711, in which he advised removing the decayed part of the tooth with a file or toothpick and filling the cavity with white wax, mastic, or gold or lead foil. The use of gold foil increased by leaps and bounds.

Tin foil was also used about this time, but amalgam soon displaced it, for it is an easier material to handle. Terro metallic cement, a mixture of sulfate of lime and oxide of iron, was introduced in the early part of the nineteenth century. Its use was limited to temporary filling. The celebrated "anodyne cement" which was popular for many years was the same thing with the addition of morphine.

The first plastic fillings were alcoholic or ethereal solutions of some of the gums such as mastic and sandarac. In 1826 M. Taveau introduced "silver paste" which was an amalgam of mercury and coin silver. G. V. Black known as the founder of modern dentistry in 1896 gave to the profession the first balanced formula for an alloy for a dental amalgam and no real change in his formula has been made in spite of exhaustive work on the material by many workers since his time.

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Inlays of various materials were known to have been used by the aborigines of Central and South America. Dr. J. A. Hambly, in an article credited to the *American Journal of Dental Science*, July 1851, described a method of grinding an inlay from a piece of artificial tooth and cementing it in a cavity. Dr. Charles Land of Detroit (grandfather of Charles A. Lindbergh) did much to perfect the method of fusing porcelain inlay. Dr. Taggart introduced a method in 1907 for making them from a wax pattern and gold inlays have in later years been brought to a high degree of perfection.

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ment of pain. Opium was the most effective, but cooling decoctions made from marshmallow, comfrey roots or camomile were favored applications. Opium or its alkaloids are still used, but pain is more often controlled by synthetic coal-tar products such as acetylsalicylic acid, acetophenetidin and aminopyrine. To control the pain from exposed pulps or nerves, Woofendale used oil of clove, cinnamon and turpentine. Such other substances as laudanum, camphor, oil of cajeput, myrrh and rosemary were also used. Oil of clove with chlorobutanol, recognized as "Odontalgicum" in the National Formulary, is used to-day for exposed pulps (toothache).

Astringents such as alum, galls, oak bark and kino had their place in the treatment of exposed pulps. Sometimes the destruction of the nerve was resorted to through the use of sulfuric or nitric acids or a hot iron. Arsenic was used to devitalize the pulp, and, while a considerable advance over the hot iron, has been replaced by the removal of the pulp under local anesthetic.

Pulp capping was introduced by Dr. Koecker in 1826. Lead was the metal early selected for this purpose because it was said to have a cooling and anti-inflammatory effect on the pulp substance. Gold and asbestos were also used. To-day pulp capping is done by using such combinations as zinc oxide and thymol, powdered metallic silver and zinc oxide with oil of cloves.

In 1839 common salt in a saturated solution was stated to be all that was needed to check bleeding after lancing or extraction. To-day, for styptic action, alum, iron preparations and silver nitrate may be used, while for hemorrhage, epinephrine and thromboplastic substances have proven valuable.

Phenol was introduced to the dental profession in 1862 to take the place of creosote, which had long been used to treat exposed pulps and sensitive dentine, and for its germicidal action. A long list of other drugs acting as disinfectants, germicides or antiseptics are now available to the dentist, a few of which are alcohol, chloramine, dichloramine, iodine, hydrogen peroxide (3%), chlorothymol, silver salts, sodium perborate and iodoform.

Numerous other drugs may be mentioned under such classifications as emollients and protectives, sialagogues, antisialagogues, antacids, cardiac stimulants, hypnotics, vasoconstrictors and dilators, antipyretics, analgesics, sedatives, local and general anesthetics. Formulas for medication under many of these classifications are being published in the *Journal of the American Dental Association* and the *JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION* in a cooperative effort between dentistry and pharmacy.

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Remedies," which is a book containing official drugs selected to promote a rational dental materia medica, and a description of acceptable, non-official medication. The book is revised yearly. The Bureau of Standards of the American Dental Association was also established to test materials and set up minimum standards.

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X-ray ranks with anesthesia as one of the two greatest discoveries that have revolutionized the medical and dental professions. Professor Roentgen discovered the X-ray in 1895. The first X-ray of teeth was made by Dr. Koenig of Frankfurt in 1896. On April 24th of the same year Dr. W. J. Morten gave a demonstration of the X-ray before the New York Odontological Society. To-day an X-ray is standard equipment in every modern dental office and has been called the dentist's "extra eye." Along with the development of the X-ray more thought was given to the relation of infected teeth to general systemic conditions. This consideration has led dentistry and medicine closer together.

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the oral cavity and the understanding of their relation to the general health of the patient. Thus the dentist and physician have joined hands in their effort to keep the public well and increase the span of human life.

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Soluble Ointment Base*

By Cyrus L. Cox† and Paul Goedrich†

Believing that there is a need for an ointment base that is easily removable by simply washing with water and that many medicaments would be more effective when applied to the skin in a non-oily but soluble vehicle led the authors to the development of the following formula:

Soluble Ointment Base

Glyceryl monostearate	10 Gm.
Glycerin	25 Gm.
Bentonite	2 Gm.
Distilled water, a sufficient quantity to make	100 Gm.

Sprinkle the bentonite upon 50 cc. of distilled water and after it is thoroughly wetted, stir until a uniform magma results. Melt the glyceryl monostearate in the glycerin on a water-bath and add to it the magma, warmed to the same temperature, and enough distilled water to make the product weigh 100 Gm. Stir until cool.

The purpose of the bentonite in this preparation is to act as a stabilizing colloid and thereby give smoothness to the ointment. The bentonite can

be conveniently kept in the form of a seven per cent magma. Such magma is stable and is about the highest concentration that can readily be poured from a bottle.

Using this Soluble Ointment Base and the process of incorporation, a boric acid ointment of the official strength was prepared. In a like manner tannic acid, iodine, phenol, sulfur, compound benzoic acid, calamine, ichthammol and potassium iodide ointments were prepared. An ointment containing ten per cent balsam of peru, prepared by incorporation, was a very smooth preparation.

An ointment containing the U. S. P. amount of sulfur and ointments of calamine and of potassium iodide of the N. F. strength were prepared by adding the medicament while preparing the ointment base. These appeared to be quite satisfactory. Ointment of potassium iodide, made without sodium thiosulfate, shows no discoloration and gives no color with starch after six months' standing.

Further work will be carried out to determine the relative absorbability of drugs and chemicals from this base as compared with the base directed in the U. S. P. XI.

* Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

† Rutgers University College of Pharmacy, 1 Lincoln Ave., Newark, N. J.

The authors are indebted to Th. Goldschmidt Corp., 153 Waverly Place, N. Y., for the glyceryl monostearate, and to American Colloid Co., 163 West Superior Street, Chicago, for the bentonite.

The D. C. Pharmaceutical Association met at Wardman Park Hotel, May 23rd and 24th. Among those on the program were: Edgar Morris, chairman, Greater National Capital Committee, Board of Trade; W. H. Whittlesey, president of the Association; Dr. H. S. Hoffman, "The Failing Heart of Middle Life;" Dr. Lloyd W. Hazelton, "The Pharmacology of Drug Combinations;" Dr. J. C. Krantz, Jr., "Anesthesia;" Dr. Charles O. Wilson, "Liquid Petrolatum Solutions of Ephedrine Chlorotone and Similar Compounds;" Dr. L. G. Gramling, "Newer Biologicals;" S. J. Waddell, president, Travelers Auxiliary; Mrs. W. H.

Whittlesey, president of Womens Auxiliary; Charles Suter; Dr. George C. Schicks, "A New Source of Business for the Pharmacist;" Dr. R. L. Sexton, "The Gastro-Enterology of the Alimentary Canal" and "What We Have Learned by Looking into the Stomach through the Gastro-scope;" Dr. G. C. Ruhland, "Pharmacy as Viewed by Public Health;" J. W. Snowden, "Inner Store Promotion of the Professional Department;" Dr. E. F. Kelly and Dr. R. L. Swain were speakers at the banquet. A motion picture, "Know Your Money," was shown under the auspices of U. S. Secret Service.

Venereal Disease Control a New and Important Contact for the Association

That the many opportunities for service in venereal disease control may be known to all pharmacists, The Joint Committee of the American Social Hygiene Association and the AMERICAN PHARMACEUTICAL ASSOCIATION held its first meeting recently in Radio City, New York.

Members of the committee include: Dr. Joseph E. Raycroft, New Jersey Department of Institutions and Agencies; Dr. Robert P. Fischelis, secretary, New Jersey State Board of Pharmacy; Dr. Robert L. Swain, editor, "*Drug Topics*;" George J. Velbach, secretary, Social Hygiene Subcommittee, State Committee on Tuberculosis and Public Health, New York State Charities Aid Association, Dr. E. F. Kelly, secretary, AMERICAN PHARMACEUTICAL ASSOCIATION and Dr. Walter Clarke, executive director, American Social Hygiene Association serve as ex-officio members. It was decided to add to the committee a practicing physician and a practicing pharmacist.

The following resolution passed by the American Social Hygiene Association was read:

WHEREAS, the one hundred and twenty-five thousand pharmacists in the United States are in a position greatly to aid the program for combating syphilis and gonorrhea; and

WHEREAS, there are many strong reasons for entering their active friendly coöperation in the present nation-wide campaign against these diseases;

Be It Resolved: That the American Social Hygiene Association and the AMERICAN PHARMACEUTICAL ASSOCIATION be requested to consider the designation of two members each of a joint committee empowered to select a fifth member, and to add Dr. Walter Clarke, executive director of the American Social Hygiene Association, and Dr. E. F. Kelly, director of the INSTITUTE OF PHARMACY; such committee to be authorized to plan and promote cooperation and activities in accordance with the purposes of this resolution.

Be It Resolved further that, in developing the work of this committee, the following activities should be considered:

(a) To carry on education activities for the instruction of pharmacists through their professional schools, professional meetings and professional periodicals, and in such other ways as may appear to the joint committee to be practicable.

(b) To draw pharmacists into participation in

the education of the public through the many opportunities afforded by drug stores.

(c) To encourage pharmacists to direct all persons who may have syphilis and gonorrhea to the proper sources of diagnosis and treatment.

(d) To study the problems surrounding the ethical and legal aspects of distribution and control of drugs and patent remedies used in the self-treatment of syphilis and gonorrhea.

(e) To seek the collaboration of other groups, especially the American Medical Association, the United States Public Health Service and the Federal Bureau of Food and Drugs.

Immediate plans were set up to keep the pharmacists informed about the venereal disease program by distributing information through pharmaceutical and medical publications. Presidents of all State Pharmaceutical Associations were urged to present resolutions at their state conventions.

Speaking at the 88th Annual Convention of the AMERICAN PHARMACEUTICAL ASSOCIATION in Richmond, Dr. Clarke outlined the ways in which pharmacy can coöperate in the campaign against the venereal disease.

"The pharmacist is not only called upon as a professional man to help in this fight against these great scourges of mankind," Dr. Clarke said. "As community leaders, voters, citizens and parents, pharmacists can help in many ways."

"There are seven principal contributions which the pharmacist and his assistant can make in assisting the health and welfare forces in their community in the conquest of syphilis and gonorrhea. Summarily these points are as follows: Don't attempt to diagnose; don't prescribe; refer applicants to physicians; don't sell 'patent remedies' for the self-treatment of venereal diseases; don't sell defective prophylactics; distribute informational literature obtainable from social hygiene societies and health departments, concerning syphilis and gonorrhea; and get the pharmaceutical society to give valued help as a body of professional men."

Following Dr. Clarke's address, a resolution was adopted pledging the support of the ASSOCIATION and requesting the state associations to appoint committees on venereal disease control. (See Resolution No. 23.)

Needs of Dealers in Insecticides

By Henry W. Heine

There is an increasing realization by the public of the need of controlling the many insects which destroy our property, as well as those which are merely annoying and those which are responsible for the transmission of plant and animal diseases.

It is therefore important that dealers in insecticides understand insect control and have sufficient knowledge of insect life and the fundamentals of the control of insect pests to diagnose the more common problems coming to their attention.

Information on any insect problem is usually available through the county agricultural agent of your community; state agricultural colleges, and Experiment Stations of these universities have bulletins available for those who request them. Much information can be accumulated from the literature, package and labels of reliable manufacturers' products. It is well to understand the labels on trade-marked materials. The knowledge of the essentials of a good insecticide, its effect on insects and its availability and cost will add to the dealer's service. A knowledge of how insecticides kill, the kind of insecticide to use

and how the materials should be applied is essential.

To supply information to pharmacists and others of the State of Indiana on the use of insecticides, the Purdue University School of Pharmacy through its Pharmacy Extension Department has coöperated with the Entomology Department of the University Agricultural Experiment Station in developing a bulletin explaining the more common phases of insect control. This bulletin discusses insecticide problems from the standpoint of the distributor and the consumer.

The Entomology Department of the School of Agriculture of Purdue University is also offering to the students of the School of Pharmacy a course dealing with the principles of insect control. The course deals with life histories, habits and structures of insects as they apply to control; principles of insecticide controls; kinds of insecticides and fumigators; nature and value of commercial preparations.

Pharmacists who have taken an interest in this important side line in their stores have found it to be profitable, interesting and a service to customers that brings them back to their stores for other merchandise.

The North Carolina State Pharmaceutical Association met for the 61st time, May 20th and 21st, in Charlotte. Among the speakers were E. C. Billheimer, Assistant Vice-President in Charge of Manufacturing, E. R. Squibb & Sons, "Recent Developments in the Vitamin Field;" B. R. Mull, Manager, Trade Advertising, Eli Lilly & Co., "Inter-Professional Relations;" Dr. Hubert Haywood, President of the North Carolina Medical Society, "Professional Relations;" Ralph W. Clark, Director of Pharmacy Service Department, Merck & Co., "Trends in Pharmacy;" William J. Smith, "Your Prescription Department—an Asset or Liability;" Hunter Kelly, "New Accepted Products in Supplement II;" John L. Howerton, "Forty Years at the Prescription Counter;" Sam McFalls, "Detailing by the Pharmacist—a Necessity for Future Dispensing;" and the Presidential Address, Phil D. Gattis.

The University of Buffalo School of Pharmacy Third Annual Spring Clinic was held on April 16th and 17th, consisting of a series of lectures, demonstrations and clinics on professional and commercial pharmacy. One hundred and twelve attended. On the program were: Thomas Weaver of Sibley, Lindsay & Curr, Rochester; Bradley Fisk of Flint & Kent, Buffalo; Ray E. Collier, National Advertising Staff of the *Buffalo Evening News*; Capt. F. J. Smith, State Bureau of Narcotic Control; Prof. M. J. Andrews, University of Maryland, School of Pharmacy; and members of the staff of the Buffalo Pharmacy School. The Clinic was followed by the annual banquet of the Alumni Association attended by two hundred and seven. John M. Considine of Boston, United Drug Co., was the principal speaker. His subject was "America's Biggest Selling Job." Prof. C. H. Gauger, University of Buffalo, was guest of honor and received the Gregory Memorial Medal.

Are We Afraid?*

By C. M. Brown†

During the last decade, drug stores all over the country have undergone the process of modernization as far as physical equipment and method of conducting business are concerned; but instead of becoming more specialized and restricting business to the purely pharmacutical, many stores have generalized to such an extent as to almost lose their identity. More emphasis is placed upon the commercial aspects of pharmacy than upon the ethical or professional side. In the eyes of the public the pharmacist has almost lost his standing as a professional man. The modern age is one of specialization. But in spite of the modernization of his store equipment and business methods, the druggist has not specialized in therapeutic agents and appliances only. He is not strictly modern.

The average pharmacist, if such a man can be conceived, seems to be more or less fearful of becoming modern to the fullest extent. The fear that such a step would mean the loss of business and even of his store, would be more or less justifiable if complete modernization were to be attempted all at once and not gradually. But therein lies the danger. To modernize gradually may mean that the most prominently evident commercialisms will never become secondary to the professional interests. The public can and must be educated to accept the pharmacist as a professional man, the physician, too, must be shown that pharmacy is a specialized field of medical care. Dispensing by physicians must be stopped by legislation if necessary. Laws

- (1) Displays.
- (2) Newspaper articles and pamphlets.
- (3) Public addresses.
- (4) Store management.
- (5) Friendly talks to individuals; physicians as well as customers.

I. Professional Displays.—Pharmacists as a rule are poor window trimmers. For many years, articles have been published upon window trimming and schools of pharmacy have given at least the rudiments of the art. In spite of all this, few drug stores have windows other than the purely commercial type. A glance at the windows of any modern first-class department store reveals an attractive picture, with the merchandise as the central theme. Is there any reason why a drug store cannot have just as attractive displays as the department store? Attractive educational windows can be devised; windows that tell the story of the discovery of a drug or chemical commonly used by the laity or that extol the educational requirements that a pharmacist must have met; windows that set forth the various legal aspects of pharmacy or that dramatize health. Such windows sell an idea. They may not sell merchandise directly but they do sell the idea of the professionalism of pharmacy to the public; the idea that a druggist is a professional man. This idea must be impressed upon the public at once and in a thoroughly convincing manner if pharmacy is to be accepted as a profession and not

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The average pharmacist, if such a man can be conceived, seems to be more or less fearful of becoming modern to the fullest extent. The fear that such a step would mean the loss of business and even of his store, would be more or less justifiable if complete modernization were to be attempted all at once and not gradually. But therein lies the danger. To modernize gradually may mean that the most prominently evident commercialisms will never become secondary to the professional interests. The public can and must be educated to accept the pharmacist as a professional man, the physician, too, must be shown that pharmacy is a specialized field of medical care. Dispensing by physicians must be stopped by legislation if necessary. Laws exist to-day against counter prescribing and diagnosis by the pharmacist or by others who are not *bona fide* physicians. The idea of legal action against dispensing by physicians is not new. Sicily had such a law in 1224. Are we afraid to fight for a national law making it illegal for the physician to dispense?

Educational methods have been used to bring about all modern social reforms and institutions. Only after long educational campaigns were the fifteen- to seventeen-hour working days for registered pharmacists and drug clerks discontinued. Only through public education was it possible to pass such laws as the Harrison Narcotic, the Federal Food, Drug and Cosmetic and the Fair Trade Acts. All these are the result of long tireless effort on the part of pharmacists and others to better existing conditions through public education. It has been and can be done. It therefore behooves us to make a concerted effort to educate the laity to the rights of pharmacists as professional men and women. Are we afraid to do this?

Any system of public education will include the use of:

- (1) Displays.
- (2) Newspaper articles and pamphlets.
- (3) Public addresses.
- (4) Store management.
- (5) Friendly talks to individuals; physicians as well as customers.

I. Professional Displays.—Pharmacists as a rule are poor window trimmers. For many years, articles have been published upon window trimming and schools of pharmacy have given at least the rudiments of the art. In spite of all this, few drug stores have windows other than the purely commercial type. A glance at the windows of any modern first-class department store reveals an attractive picture, with the merchandise as the central theme. Is there any reason why a drug store cannot have just as attractive displays as the department store? Attractive educational windows can be devised; windows that tell the story of the discovery of a drug or chemical commonly used by the laity or that extol the educational requirements that a pharmacist must have met; windows that set forth the various legal aspects of pharmacy or that dramatize health. Such windows sell an idea. They may not sell merchandise directly but they do sell the idea of the professionalism of pharmacy to the public; the idea that a druggist is a professional man. This idea must be impressed upon the public at once and in a thoroughly convincing manner if pharmacy is to be accepted as a profession and not as a trade.

II. Newspaper Articles.—Articles can be written upon the discoveries of quinine, morphine, vitamins, insulin and anesthetics. The federal and state laws regulating pharmacy for the safety of the public such as the Harrison Narcotic; the Food, Drug and Cosmetic acts; the Cannabis acts; and the Poison Laws, make interesting reading. The various historical periods of pharmacy and the Pharmacopœia and National Formulary also lend themselves to this purpose. Contributions of this character are frequently acceptable to newspaper editors, especially to those of the smaller town papers. Even if payment for publication is necessary, the cost involved can be met by the local pharmaceutical association or by groups of pharmacists, thus making but a nominal cost to any one individual. Much money is spent upon advertising merchandise; are we afraid to spend some to bring pharmacy before the public as a profession? Merchandise is not sold without overhead cost; education in any form costs, but it pays back in the end. In a midwestern city a number of years ago, the local pharmaceutical organization, through contributions from its own members and others, ran in one of the city papers a series of seventy-five or more articles upon the various professional aspects of pharmacy and upon health. Every article carried

* Presented before the Section on Pharmaceutical Economics, A. P. H. A., Atlanta meeting, 1939.

† 2586 Summit St., Columbus, Ohio.

the phrase "see your physician." Public interest was aroused and there was much favorable comment from physicians. Increased prescription business was reported by some stores, but others failed to receive any benefit at all. It is interesting to note that those stores reporting an increase in the number of prescriptions filled were those in which additional efforts were made to publicize the professional side of pharmacy. One mistake, however, was made. This educational campaign was dropped too soon or at least it should have been repeated at intervals. In passing it is interesting to note that the stores that entered fullheartedly into the campaign are still recognized as "the best places to take a prescription" both by physicians and the laity. These same stores claim that there has been no falling off of the prescription business for them to any alarming extent, even during the last few years.

III. Public Addresses.—No opportunity to address a gathering, however small, should be refused or overlooked. Do not be afraid to offer your service as a speaker or to suggest a subject that will bring before your audience the training and ability you possess to speak with authority upon public health and medicinal subjects. It should be pointed out to the laity at every opportunity that the pharmacist is not trained to diagnose but to compound; that while the law does not permit any one save a *bona fide* physician to diagnose and prescribe treatment, it does make the pharmacist legally responsible for detecting mistakes in the ingredients or the dose prescribed and for filling forged or otherwise illegal prescriptions for a narcotic. The necessity for the registration of the sale of paregoric or a poison should likewise be explained whenever possible.

These talks should be brief, straightforward and to the point, and impersonal in character. Avoid the use of the personal "I" as much as possible. To be egotistical is not to be professional. Do not use technical language unless talking to a professional group. Dramatize the address with displays. Some of the same displays that have been used for the window may be slightly modified and used for this purpose.

IV. Store Arrangement.—The use of the modern "open display" arrangement for the prescription department has increased the prescription practice in many stores. This is especially true where provisions have been made for a comfortable waiting room for patients and a lounge or consultation room for physicians. Both these rooms should afford observation of the pharmacist at work. The physicians' quarters, however, should be shut off from public view. The proper arrangement and equipment of the prescription department itself are so well known as to need no repeating here. The opportunity for impressing both patients and physicians by this arrangement with the professionalism of pharmacy, is practically unlimited. The cost involved is not necessarily so great that proprietors of smaller stores need be afraid to try it. The floor

space needed, however, will force a shrinkage upon that now allotted to the soda fountain and lunch counter. This is exactly as it should be if the professional side of pharmacy is to receive the recognition that it deserves. The lunch and fountain service should be isolated from the professional side of the store or at least reduced in size to such an extent that the restaurant atmosphere is lost. Are we afraid to make these changes? Is the restaurant business more profitable than the prescription? A recent Lilly Digest¹ shows that, "In 152 drug stores, the prescription revenue was 12.8% of the sales volumes. From prescriptions alone the margin was 22.3% of the total store margins or 60% of the sales. Thus quite aside from the prestige which the prescription department adds to a drug store and the opportunity for a variety of other sales, it is a real contributor to the earnings." Does this look as if the proprietors of drug stores should be afraid to spend money to increase the space and attractiveness of the prescription department?

V. Personal Interviews.—The friendly conversation with both the patient and the physician is a source for more educational publicity for the professionalism of pharmacy. Any pharmacist who is looking for opportunities to let fall hints in an unobtrusive manner of his professional ability to be helpful to the doctor in solving some perplexing problem of medication, can see many such openings within a very short period of time. In the friendly personal talk to customers lies the best chance to combat the spreading evil of counter diagnosing and prescribing and of overcoming the idea that the pharmacist is a profiteer. Counter prescribing is both illegal and unethical, yet many store owners either directly or indirectly force their clerks to do it, through fear of losing their jobs if sales are lost. There need be no great number of sales lost through not prescribing. After listening attentively to a description of symptoms a quiet, yet forceful, explanation of several probabilities as to cause and the seriousness of some of them will convince the patient of the need of the skilled diagnosis of the physician and yet not impair the standing of the pharmacist. In nine times out of ten the prescription given in such cases will be returned to the druggist for filling.

Every pharmacist, be he ever so humble, has been at times accused of profiteering when a higher price is asked for a proprietary on prescription than when it is asked for by name only. Ground for such complaint has arisen from:

(1) Making the difference between the prescription price and the retail price of the medication too great.

(2) The physician telling the patient what the cost of filling should be.

No laborer or other unionized individual will deny the right of the pharmacist to charge a com-

¹ *Druggist Circular*, lxxxii, 9 (1938), 15.

pounding fee based upon a time factor any more than he will deny the right of labor unions to set an hourly basis of pay even for WPA labor. Are we as pharmacists afraid to make public the fact that the charge for a prescription is based upon the several components of a labor charge, including legal responsibility, and the selling price of the materials used? Are we afraid to have it known that:

(1) A prescription is a legal document. It is a guarantee that the substances or materials called for therein are in the judgment of the physician the best remedy for disease or for the patient's condition.

(2) The druggist must use these substances or materials and nothing else.

(3) The law makes it mandatory upon the pharmacist to check the prescription for mistakes in dosage and substances used. Many preparations have names that sound much alike, the difference in spelling and dose only assures the pharmacist that the patient is receiving the *correct substance*. No such guarantee of correct dosage or the use of proper substance exists when no prescription is presented. A written guarantee is much easier to prove in court than a verbal one. The label placed upon a prescription container is a written guarantee of safety. Protection of any sort must be paid for. Fire and life insurance are not free, neither is the professional advice of the lawyer or physician. Are we afraid to emphasize these facts?

(4) Even the dispensing physician charges, either directly or indirectly, for the medicine which he gives. Prescriptions are given or a charge is made for the more expensive medicaments or for those that do not keep for any length of time after the container is once opened. This charge may be less to some degree than that which a druggist would have made, but the doctor carries only a few such substances and little if any overhead or loss accrues. The price of the cheaper medicines is involved in the fee charged. No one, not even a doctor, is always giving away free that which originally had to be paid for. Are we afraid for the public to know this? All these facts can be made known quietly and in an unoffensive manner.

VI. Professional Detailing of the Physician.—

Are pharmacists afraid to personally talk to physicians about their ability and training to offer them a greater professional service than the mere filling of prescriptions? We are particularly trained to manufacture² "many special combinations of medicaments that are not offered on the market in the form of tablets, capsules, ampuls or effervescent salts." If sufficient demand for such products can be obtained, the purchase of the necessary equipment for their production can be easily financed.

"We are in position to suggest the use of better tasting vehicles, better appearing mixtures, better colored lotions, and other little things that the busy physician has no time to consider but that would be of real assistance."² Why not sell the dispensing physician his medicines? The resulting increased business would enable the pharmacist to obtain a better discount.

Some physicians need a serious personal interview in which the unfairness of the following circumstances is pointed out:

(1) Telling the patient what a prescription will cost.

(2) Prescribing less than the smallest commercial unit of those products which rapidly deteriorate when the container is once opened.

(3) Telling the patient that all the pharmacist has to do in filling a particular prescription is to take the bottle off the shelf and hand it to him.

This must be done in a tactful way. To point out that the pharmacist never sets the price of an office call usually brings home the point.

A note of warning must now be sounded. Some form of socialized medicine is bound to come. We must not be afraid to see to it that physicians are not allowed to dispense and that a fair compounding fee or other charge is permitted to the pharmacist. We must not be afraid to make these demands of the government before it is too late.

In summarizing, then, we as pharmacists must not be afraid to:

(1) Modernize our stores to the extent of emphasizing professional pharmacy over commercialization.

(2) Undertake a campaign to educate the public to this professionalism and legal responsibility of the pharmacist.

(3) Recall to the physician that we are particularly trained to aid him secure the best medical service for the patient and to reduce his difficulties in many other ways

(4) Insist upon such legislation as will decrease the encroachment of others upon the ethical and legal rights of pharmacy.

(5) Realize that while the modern drug store cannot be molded upon the pattern of the old apothecary shop, certain commercialism should not be permitted to dominate the atmosphere. The commercial aspects of pharmacy must not be neglected, neither must they be overemphasized. The professional must dominate the commercial, otherwise pharmacy will sink into oblivion as a profession and become merely a trade.

² George C. Schicks, *Druggists Circular*, lxxxii, 6 (1938), 16.

Alpha Pi of Alpha Chi Sigma announced the first annual Charles Edward Munroe Memorial Lecture at Corcoran Hall, George Washington University, on Wednesday, April 3rd, at 8 P.M. Dr. E. A. Hauser

of Massachusetts Institute of Technology spoke on "Recent Advances in the Colloid Chemistry of Clay Minerals."

The Massachusetts College of Pharmacy conducted Refresher Courses on May 21st, 23rd and 28th. The following lectures were given: "The Pharmacology of the Sulfanilamide Group," H. L. Reed; "Pharmaceutical Application of Hydrogen Ion Concentration and p_H ," Ray S. Kelley; "New Developments in Dispensing Pharmacy, I," L. M. Ohmart and Mitchell Stoklosa; "The Federal Food, Drug and Cosmetic Law and the Pharmacist," J. H. Goodness; "Insecticides and Rodenticides," M. W. Quimby; "Recent Developments in the Biochemistry of the Vitamins," C. W. Bayer; "The Patman Chain Store Tax Bill," G. F. Archambault; "New Developments in Dispensing Pharmacy, II," L. M. Ohmart and Mitchell Stoklosa; "Prescription Clinic," H. C. Newton, L. A. Thompson, L. M. Ohmart and Mitchell Stoklosa; "Recent Developments in the Biochemistry of the Endocrines," C. W. Bauer; "Forum on Drugstore Business Problems," J. H. Goodness and G. F. Archambault; "Pharmacology and the Practicing Pharmacist," H. W. Youngken and H. L. Reed.

Temple University.—For the fourth consecutive year, students of the School of Pharmacy were the recipients of the silver trophy awarded annually by the AMERICAN PHARMACEUTICAL ASSOCIATION for the best professional display in connection with the observance of "National Pharmacy Week."

The award was made by Dr. Andrew G. DuMez, President of the A. Ph. A., at a student convocation presided over by Dr. H. Evert Kendig, dean of Temple's Pharmacy School, in the presence of leading figures in the field of pharmacy. The prize-winning display was designed and executed by Raymond Borland, Leonard Broude, Edward Crescenta and Edith M. Di Lascio, all seniors in the school.

In an address preceding the presentations, Dean DuMez outlined the development of pharmacy as an important phase of the public health service, declaring that pharmacy had played a conspicuous part in increasing human life expectancy from 35 to 62 years. He declared that there are now 125,000 pharmacists practicing in drug stores, and about 3000 practicing elsewhere throughout the country. The pharmacist, he said, must be prepared to render other than professional services, including civic, charitable and religious activities.

The Pittsburgh College of Pharmacy, University of Pittsburgh, held their Fourth Annual Pharmaceutical Conference on May 1st. The following were on the program: J. Leon Lascoff, Sc.D., "Our Recipe Book;" Louis Saalbach, Phar.D.,

"The National Formulary Past and Present," E. F. Cook, P.D., Ph.M., M.Sc., "Notable Developments in the Pharmacopoeial Program." A Testimonial Banquet to Dr. Louis Saalbach followed. There was also a scientific exhibit of newer pharmaceuticals.

Dr. John C. Krantz, Jr., Medical School, University of Maryland, has disclosed the development of a new anesthetic combining ether and cyclopropane in one molecule. Dr. Krantz further states the school has just received a grant of \$6000 from an Ohio pharmaceutical concern to continue research on the new drug, which is still in the experimental state. The new drug, which is called "cyprome ether," appears to have definite advantages over ether. Only about six anesthetics have been accepted by the medical profession in a hundred years and it is believed that this new anesthetic will be added to the list.

The Connecticut College of Pharmacy, New Haven, celebrated "Guest Night," on April 26th, under the auspices of the Student Branch of the A. Ph. A. The trustees, faculty and students welcomed the visitors. The occasion was for the purpose of acquainting friends with the training and skill of the pharmacist. Senior students compounded prescriptions, freshmen prepared and purified inorganic medicinal chemicals, juniors manufactured medicinal preparations as directed by the U. S. Pharmacopoeia and the National Formulary, and sophomores produced medicinal organic chemicals by synthetic methods, and gave other demonstrations as well.

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IN THE NEWS

The Massachusetts College of Pharmacy conducted Refresher Courses on May 21st, 23rd and 28th. The following lectures were given: "The Pharmacology of the Sulfanilamide Group," H. L. Reed; "Pharmaceutical Application of Hydrogen Ion Concentration and pH ," Ray S. Kelley; "New Developments in Dispensing Pharmacy, I," L. M. Ohmart and Mitchell Stoklosa; "The Federal Food, Drug and Cosmetic Law and the Pharmacist," J. H. Goodness; "Insecticides and Rodenticides," M. W. Quimby; "Recent Developments in the Biochemistry of the Vitamins," C. W. Bayer; "The Patman Chain Store Tax Bill," G. F. Archambault; "New Developments in Dispensing Pharmacy, II," L. M. Ohmart and Mitchell Stoklosa; "Prescription Clinic," H. C. Newton, L. A. Thompson, L. M. Ohmart and Mitchell Stoklosa; "Recent Developments in the Biochemistry of the Endocrines," C. W. Bauer; "Forum on Drugstore Business Problems," J. H. Goodness and G. F. Archambault; "Pharmacology and the Practicing Pharmacist," H. W. Youngken and H. L. Reed.

Temple University.—For the fourth consecutive year, students of the School of Pharmacy were the recipients of the silver trophy awarded annually by the AMERICAN PHARMACEUTICAL ASSOCIATION for the best professional display in connection with the observance of "National Pharmacy Week."

The award was made by Dr. Andrew G. DuMez, President of the A. Ph. A., at a student convocation presided over by Dr. H. Evert Kendig, dean of Temple's Pharmacy School, in the presence of leading figures in the field of pharmacy. The prize-winning display was designed and executed by Raymond Borland, Leonard Broude, Edward Crescenta and Edith M. Di Lascio, all seniors in the school.

In an address preceding the presentations, Dean DuMez outlined the development of pharmacy as an important phase of the public health service, declaring that pharmacy had played a conspicuous part in increasing human life expectancy from 35 to 62 years. He declared that there are now 125,000 pharmacists practicing in drug stores, and about 3000 practicing elsewhere throughout the country. The pharmacist, he said, must be prepared to render other than professional services, including civic, charitable and religious activities.

The Pittsburgh College of Pharmacy, University of Pittsburgh, held their Fourth Annual Pharmaceutical Conference on May 1st. The following were on the program: J. Leon Lascoff, Sc.D., "Our Recipe Book," Louis Saalbach, Phar.D.,

"The National Formulary Past and Present," E. F. Cook, P.D., Ph.M., M.Sc., "Notable Developments in the Pharmacopoeial Program." A Testimonial Banquet to Dr. Louis Saalbach followed. There was also a scientific exhibit of newer pharmaceuticals.

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OBITUARY

David V. Ellsworth

David V. Ellsworth, Cleveland, O., died on April 3rd at his home. Cleveland Lodge, B. P. O. E., conducted services, and burial was in Flint, Mich. Mr. Ellsworth was 64 years of age, for many years was a member of the City Club, and was a member of the AMERICAN PHARMACEUTICAL ASSOCIATION.

He is survived by his widow, Mrs. Dora A. Ellsworth, and his mother, brother and sister, all of California.

Dr. Bernard Fantus

Dr. Bernard Fantus, leader in the field of therapy, died at his home in Chicago, April 14th, aged 65. He was born in Budapest, Hungary, September 1, 1874. After preliminary study in Vienna he came to the United States, where he attended the University of Illinois School of Medicine and received his M.D. degree in 1899. He did graduate study in pharmacology at Strasbourg in 1906, at Berlin in 1909 and at the University of Michigan in 1917, from which he received the degree of Master of Science. He served as associate attending physician at the Cook County Hospital 1901-1902, and was in charge of the medical dispensary at the University of Illinois 1902-1913. From 1903-1924 he was professor of pharmacology and therapeutics at the University of Illinois School of Medicine and then taught as associate professor of medicine at Rush Medical College from 1924 to 1932. Since 1932 he had been professor of pharmacology, materia medica and therapeutics at the University of Illinois. He served also as professor of physiology at the College of Pharmacy of the University of Illinois from 1913 to 1917. Since 1930 he had been attending physician to the University Hospital and since 1934 director of therapeutics at the Cook County Hospital.

Dr. Fantus contributed widely to scientific medical literature and conducted numerous original investigations in the field of therapy. His research covered particularly such topics as the use of candy medication, the technique of medication and, more recently, the preservation of blood. In 1933 he was awarded the first honorary degree given by the American Therapeutic Society for his work in making medication more palatable for children. The "blood bank" at the Cook County Hospital was established by him on March 14, 1937, and his plan of organization has been widely followed. Since 1917 he had been editor of the "Year Book of General Therapeutics." His contributions to medical literature include also "Prescription Writing," "Candy Medication," "Useful Cathartics" and "Technic of Medication" and many periodical articles.

For many years he contributed his time and his efforts toward the establishment of an area in Chicago surrounding the Cook County Hospital and the nearby medical schools and hospitals as a medical park. More recently he was chairman of the Committee on Spas of the American Medical Association. He was an indefatigable worker, a genial personality and an inspirational contributor in the field of therapeutics.—*Jour. A. M. A.*

Mrs. Adelaide M. Godding

Mrs. Adelaide M. (Smith) Godding, widow of Dr. John G. Godding, 611 Centre St., Newton, Mass., died on April 10th. She was born in Epping, N. H., October 23, 1857, and moved to Boston a few years later, living there until she came to Newton in 1921. In 1889 she married John G. Godding, formerly of Gardner, Me.

Mrs. Godding was deeply interested in Women's Clubs and was a member of Sarah Hull Chapter and Old North Chapter, Daughters of the American Revolution. She was also a former president of the New Hampshire Daughters of Boston and the Ex Club, New Hampshire Daughters, and a member of the Women's Organization, Boston Association of Retail Druggists, and a past-director of the Massachusetts State Federation of Women's Clubs.

Her funeral was held on Saturday in Eliot Church, Rev. Ray Ensden officiating. Burial was in Forest Hills Cemetery.

Mrs. Godding had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1926, but had attended the meetings regularly with Dr. Godding, adding a new bar to her pin for each convention. She furnished a room in the AMERICAN INSTITUTE OF PHARMACY in memory of Dr. Godding.

Paul Pearson

Paul Pearson, for more than twenty years president of the Washington Wholesale Drug Exchange and assistant to the Washington representative of the National Association of Retail Druggists for the past five years, died at his home on May 1st, Washington, D. C., after a month's illness. He was a native of Washington and had operated a number of drug stores in the District. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1925.

Funeral services were held in St. Albans Church May 3rd, followed by a Masonic funeral at Gawler's funeral home.

Surviving are his wife and one daughter, Miss Margaret Pearson of South Bend, Ind.

GENERAL NOTICES

Remittances. Annual membership dues, subscriptions, notices of changes of address, orders for subscriptions and back numbers and claims for missing numbers should be sent to Secretary E. F. Kelly, 2215 Constitution Avenue, Washington, D. C.

Claims will not be allowed for copies of journals lost in the mails unless such claims are received within sixty days of the date of issue, and no claims will be allowed for issues lost as a result of insufficient notice of change of address—ten days' advance notice is required.

Responsibilities for Statements Published. The AMERICAN PHARMACEUTICAL ASSOCIATION and the Editor of the Practical Pharmacy Edition of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION assume no responsibility for statements and opinions advanced by contributors to THIS JOURNAL.

Advertising. For information regarding advertising in THIS JOURNAL or the other publications of the ASSOCIATION, address Secretary E. F. Kelly 2215 Constitution Avenue, Washington, D. C.

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Entered as second-class matter January 23, 1917, at the Post Office at Easton, Pa., under the act of March 3, 1879, as 24 times a year: Scientific Edition monthly on the fifth. Practical Pharmacy Edition monthly on the 20th. Acceptance for mailing at a special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 10, 1918.

The Honorary President

William Perry Porterfield, elected as Honorary President of the AMERICAN PHARMACEUTICAL ASSOCIATION at its annual convention in Richmond, Va., in May, and known as one of Fargo's "grand old men," was born in Martinsburg, W. Va., December 20, 1855; he was educated at home under a private tutor and later graduated from the Philadelphia College of Pharmacy and Science. In 1882 he moved to Davenport, Dakota; and in 1894 went to Fargo where he, with Henry F. Fout, established the firm of Fout & Porterfield, ten years later buying out his partner. He continued to operate the store until 1912 when he sold out in order to devote his time to other interests.

Mr. Porterfield has been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911, was at one time president of the National Association Boards of Pharmacy, and served on their Executive Committee for nine years. He evidenced a keen interest in this work as he had always been a champion of reciprocity. He was also a member of the North Dakota State Board of Pharmacy for twenty-three years.

In politics Mr. Porterfield was a lifelong and ardent Democrat and was the first Democrat elected from his district to the North Dakota State Senate.

When the Fargo Park Board was organized he took a great interest in the building of a fine park system for the city

and aided in the selection and purchase of much of the park property, and in its improvement. He was a member of the Board from 1910 until his recent resignation, having been a civic leader and community builder in that section for half a century.

For the past twenty years Mr. Porterfield has spent his winters in the South, and is probably as well known in Ocean Springs, Florida, where he owns considerable prop-

erty, as in Fargo. This spring he did not return to Fargo but went instead to Hagerstown, Md., where his only living brother, Milton W. Porterfield, has a farm almost within the city limits. His nieces and nephews who reside there have frequently urged him to make his home with them.

Mr. Porterfield has long been a member of the Fargo Elks Lodge, No. 260, and together with Judge W. H. Barnett, both of whom are octogenarians and the two oldest living members, was honored in 1937 at a special service of



WILLIAM P. PORTERFIELD

the Lodge.

For eighteen years Mr. Porterfield managed the Coterie Dance Club, one of Fargo's oldest and best known social organizations, with much success.

Mr. Porterfield will spend most of the summer in Maryland, at 1300 Virginia Avenue, Hagerstown, but will return to Fargo in the Autumn, and on December twentieth, next, will celebrate his eighty-fifth birthday.

Practical Pharmacy Edition

Journal of The American Pharmaceutical Association

E. F. Kelly, Editor, 2215 Constitution Ave., Washington, D. C.

Excise Tax on Ethyl Alcohol to Be Increased

The National Association of Retail Druggists and the AMERICAN PHARMACEUTICAL ASSOCIATION have coöperated for several years past in an effort to have the excise tax imposed by the federal and some state governments on ethyl alcohol used in medicines, either removed or reduced. Last fall, Rowland Jones, Jr., and E. F. Kelly, representing the Associations, conferred with officials of the Treasury Department and submitted strong statements with supporting data showing why this relief should be granted with respect to a product so necessary in the prevention and treatment of disease. It was pointed out that pharmacists had operated during prohibition under a permit system which seemed to be effective, that diversion under the more favorable conditions then existing had been very small indeed, and that they were now willing to accept any reasonable requirements necessary to prevent abuse. It was also emphasized that the basic act recognized alcohol for industrial as well as for beverage purposes and provided that the use of the former should be encouraged, and that any step toward reducing the costs of medical care especially for the indigent and those in the lower income groups would be helpful.

It was felt that a favorable impression had been made on these officials and that some relief might be expected. Later, it was advised that no tax legislation would be considered during the present session of the Congress and that, therefore, no relief could be considered until the next session. When recent developments made a national preparedness tax bill necessary, it was learned that instead of a reduction, the excise tax on alcohol would be increased 75 cents per proof gallon or about \$1.50 per wine gallon, making a total tax of approximately \$5.70 per wine gallon on a necessary product costing about 40 cents per gallon.

Messrs. Jones and Kelly again conferred with the Treasury officials who advised that the bill had to be so hurriedly drawn that time did not permit working out either a reduction or an exemption in favor of alcohol used for strictly medical purposes. However, both gentlemen appeared before the Ways and Means Committee of the House of Representatives and the Finance Committee of the Senate in favor of at least an exemption with respect to the proposed increase in tax. It was cited that a precedent had been set during

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the last war when the tax on alcohol went to \$6.40 per gallon; a differential of \$2.20 per gallon was set up in favor of alcohol for medicinal purposes.

An exemption for retailers in distilled spirits of one hundred gallons from the floor tax of 75 cents per gallon on distilled spirits was included in the tax bill as finally passed and retailers should promptly check their stocks.

It is encouraging to note that Senator

Harrison, Chairman of the Committee on Finance stated on the floor of the Senate that he expected that the House Ways and Means Committee and the Joint Congressional Committee on Revenue Taxation would soon undertake a study looking to a general revision of the revenue statutes.

The differences between the House and Senate bills were ironed out promptly and the measure was enacted on June twenty-second.—E. F. K.

National Pharmacy Stamp, Progress Being Made

The campaign which the pharmacists of the nation carried out to get their friends and customers to sign petitions urging the Post Office authorities to issue a Pharmacy Stamp was a success. More than 600,000 persons signed these petitions. The accompanying photograph shows the results.

Colonel Watson, one of the Presidential Secretaries, recently received Dr. R. L. Swain, a member of the Committee for a National Pharmacy Stamp, Mr. Murray Breese, who is assisting the National Committee, and Secretary Kelly of the AMERICAN PHARMACEUTICAL ASSOCIATION, and accepted the following letter directed to the President by Secretary Kelly:



"MY DEAR PRESIDENT ROOSEVELT:

Over a half-million people of this country have thought enough of the services of

pharmacy to sign petitions gathered from all over the country requesting the issuance of a Pharmacy Stamp in 1940. Further-

more, 60,000 pharmacists (practically 100 per cent of the pharmacists of the nation) have signed petitions of their own, independent of the foregoing. The attached news photograph of these petitions is a visual demonstration of their magnitude.

The move for a pharmacy stamp is now nearly ten years old, having originated in several state associations. To date practically every state pharmaceutical association has passed a resolution asking for such a stamp, as have also the National Association of Retail Druggists and the

AMERICAN PHARMACEUTICAL ASSOCIATION—the two authoritative bodies in this profession. The magazine *Stamps*, edited by

Mr. Harry Lindquist, the official organ of the Philatelic Society, has commented favorably on the project.

As a result of these actions, together with a great deal of favorable comment in the professional and trade press, a National Committee for a Pharmacy Stamp has been organized from among the officials of various pharmaceutical bodies to follow through with the Post Office.

It is at their behest I am writing to solicit your personal interest in this matter and I desire to point out that this year—the 12th Decennial Revision of the United States Pharmacopœia—is an ideal time for the purpose, since the proposed stamp could feature this century-old Government Book of Standards which is a joint contribution of pharmacy and medicine to public health standards.”—E. F. K.

Inter-Professional Cooperation

One of the encouraging developments of recent years is the growing realization among physicians, dentists, nurses and pharmacists not only of the desirability but also of the necessity for close and effective coöperation between the public health professions. If all of the members of these professions were working in unison on problems of national interest they would still constitute a “minority group.” If they do not coöperate, the result is too obvious to require comment. The element of greatest strength is that while these groups are comparatively small in numbers, they are engaged in a most important and very necessary activity, that of protecting and preserving the public health.

The evidences of increasing coöperation are too numerous to be mentioned but a few may be cited as examples. The state medical and pharmaceutical organizations in Connecticut, Alabama and other states have appointed joint committees to promote better relations. In Indiana, New Jersey, Oregon and other states, Health Councils composed of representatives of the health professions have been organized to promote and to protect the joint objectives of these groups. It is recently reported that physicians, dentists and pharmacists in one section of Idaho have taken steps to organize a committee to consider measures which might bring governmental control of these professions. Almost every issue of every pharmaceutical publication carries a notice of a joint meeting between pharmacists and members of other health professions, and the interchange of fraternal dele-

gates at meetings of the professions is a regular part of their programs.

At a recent meeting in New York City, attended by physicians and pharmacists, Dr. Nathan B. Van Etten, then President-Elect and now President of the American Medical Association, in speaking about the National Health Program made the following comments, taken from different portions of the address, which emphasize the importance of inter-professional coöperation:

“All professionals must develop a concert of action in order to save themselves from professional extinction and in order to give service which will raise the level of the health of the American people.”

“Although your first interest is in the profession of pharmacy, I would like you to think of all of the professionals whose coöperation could be of incalculable value in raising the standards of our public health.”

“The cordial coöperation of all professions assumes great importance to-day when the tendency of much political thinking runs toward centralization of authority in the hands of government.” . . .

“Each profession has its own traditions. As I review them I believe they are all trying to profit by their experience to create a generous spirit toward one another and to find common ground upon which they may stand for development of a sound body of American opinion.”

“The professions of medicine and dentistry and pharmacy—the professions of law and the ministry of religion and the

profession of nursing—all have interdependent responsibility for promoting the health of our people." . . .

"The detection of disease by the organized professions is a civic function which is vital to the health of the nation."

"In order to be effective the professions must be the targets of special education to make them realize their local responsibility and all people must be educated in the values of the help the professions are competent to give and they must be willing to support their efforts."

"The general practitioners among physi-

cians and dentists and pharmacists, lawyers and clergymen are the professionals who know local needs. Many of them work under their own power, but the load has become much greater than formerly since public health needs are better understood and concentrations in urban groups have assumed new proportions."

"Whatever can be done to mobilize all the professions into a solid front, to promote the best and most influential American citizenship, should be the chief objective of all such assemblies as are exemplified here tonight."—E. F. K.

National Dental Program

By G. C. Schicks, Chairman

Millions of dollars are spent each year for tooth powders, pastes and liquid dentifrices. Formulas for such preparations are being requested by the dentist for his patients. Since the radio programs have been informing the laymen about "the powder the dentist uses to clean teeth," the public has become interested in having the dentist prescribe such preparations. The pharmacist should be prepared to meet these requests and to suggest formulas.

Tooth Powders

The formula for tooth powder submitted is recognized by the National Formulary as *Dentifricium*. It makes a very satisfactory preparation. It may be flavored to suit the taste. The calcium carbonate precipitated that is used may be purchased in several degrees of fineness (see Accepted Dental Remedies, page 98).

Both the prepared and the precipitated calcium carbonate may be used in tooth powders. The prepared is more abrasive, therefore the precipitated is usually preferred. Sometimes the two are combined, and, when so, the precipitated is usually in excess. Powders that are abrasive to the extent that they scratch the enamel of the teeth should not be used except by the dentist. If one really used the powder the dentist uses in his office to clean teeth, it wouldn't be long before the teeth would be

severely injured. The kind of powder the dentist may use in a prophylaxis and the kind the patient should use for daily cleaning of the teeth are two very different things.

What claims should be made for a tooth powder? The only safe one is that it aids in removing material adhered to and surrounding the teeth. The value of a medicated tooth powder has never been satisfactorily proved. However, medicated tooth powders are quite popular. Since they are requested by the practicing dentist the pharmacist should be prepared to supply them. If an oxidizing tooth powder is called for, magnesium peroxide, 24 to 60 Gm., or sodium perborate, 18 to 120 Gm., may be used in the formula submitted by replacing equal amounts of the calcium carbonate precipitated.

If an astringent powder is desired, add any one of the following substances usually in not greater amount than one per cent: zinc sulfate, zinc chloride or zinc phenol-sulfonate. The preparation of an alkaline formula is stated under the formula given.

Liquid Dentifrices

Liquid dentifrices have returned to popularity. They are probably as inexpensive as any form of agent used to clean the teeth by the patient. A drop or two is all that is needed on a moistened toothbrush. There is no loss or waste. The formula given be-

low is an especially pleasant one to use. It is considered by many more pleasant than some of the newer liquid dentifrices using such substances as sodium laurel sulfate. If a formula using the new wetting agents is desired it may be obtained for the asking.

Mouth washes should represent a harmless, pleasant rinse for the oral cavity. When they do so they have probably answered their purpose. The value of medication in mouth washes is questionable. Liquor Antisepticus, N. F., is germicidal under certain conditions. It should be held in the mouth for several minutes to have such an effect.

Salt has long been used to make a mouth wash. The formula presented produces an attractive pink powder and when used according to directions is soothing to the mucous membrane. To obtain the pink color, all that is necessary is to rub the calcium oxide and phenolphthalein thoroughly together. The remaining ingredients are then mixed together and added in small amounts. This powder produces a pink solution when placed in water. The color may fade when rinsed around in the mouth due to acids present. Sodium chloride in a very fine powder makes the best preparation. This condition may be brought about by thorough trituration, or it can be purchased in this fine state. The address of the manufacturer will be given on request.

Prescriptions—Series V

SALINE MOUTH RINSE

(Pink)

(a) R _x	Metric Approx.	Apoth. Equivalents
Calcii Oxidi	2.0 Gm.	℥ ss
Phenolphthaleini	0.10 Gm.	gr. iss
Saccharini Solubile	0.36 Gm.	gr. vi
Olei Cinnamomi	0.60 cc.	m. ix
Sodii Chloridi <i>ad</i>	120.00 Gm.	℥ iv

*M. et fiat pulvis siccus

Sig: $\frac{1}{4}$ teaspoonful to cup warm water for mouth wash.

Note: Flavor may be changed by substituting Eucalyptol 0.06 cc. and Methyl Salicylate 0.5 cc. in place of Olei Cinnamomi. Makes a pleasingly colored and flavored salt solution.

*Means—make a dry powder.

LIQUID DENTIFRICE

(b) R _x	Metric Approx.	Apoth. Equivalents
Pulv. Saponis	7.20 Gm.	℥ ii
Glusidi	0.24 Gm.	gr. iv
Liq. Amaranthi	1.00 cc.	m. xv
Olei Cinnamomi	0.60 cc.	m. ix
Olei Menthae		
Piperitae	0.60 cc.	m. ix
Olei Caryophylli	1.20 cc.	m. xviii
Alcohol	90.00 cc.	℥ iii
Aquae Dest. <i>q. s. ad</i>	120.00 cc.	℥ iv
M.		

Sig: Sprinkle on moistened brush and use as dentifrice.

Note: Soluble dentifrice for daily use.

TOOTH POWDER

(c) R _x	Metric Approx.	Apoth. Equivalents
Pulv. Saponis	6.0 Gm.	℥ iss
Saccharini Solubile	0.30 Gm.	gr. v
Olei Menthae		
Piperitae	0.48 cc.	m. viii
Methylis Salicylatis	0.96 cc.	m. xv
*Calcii Carb. Praec.		
<i>ad</i>	120.00 Gm.	℥ iv

Sig: Use on moistened tooth brush.

Note: Alkaline tooth powder—replace portion of Calc. Carb. substituting one of the following:

Mag. Oxide	48.0 Gm.	℥ iss
Sod. Borate	25.0 Gm.	℥ vi
Sod. Bicarb.	60.0 Gm.	℥ ii

*See A. D. R. for list of brands accepted by Council on Dental Therapeutics.

MOUTH WASH

(d) R _x	Metric Approx.	Apoth. Equivalents
Acidi Borici	6.00 Gm.	℥ iss
Thymolis	0.24 Gm.	gr. iv
Chlorthymolis	0.24 Gm.	gr. iv
Mentholis	0.24 Gm.	gr. iv
Eucalyptolis	0.48 cc.	m. viii
Methylis Salicylatis	0.28 cc.	m. v
Oleum Thymi	0.07 cc.	m. i
Alcohol	72.00 cc.	℥ xviii
Aquae. Dest. <i>q. s. ad</i>	240.00 cc.	℥ viii

Note: May be obtained by writing for Liquor Antisepticus, N. F.*

*National Formulary, p. 219.

Mouth washes have no demonstrated therapeutic value. Liquor antisepticus may be regarded as a pleasantly flavored mouth rinse.

MOUTH WASH

DOBELL'S SOLUTION

(e) R _x	Metric Approx.	Apoth. Equivalents
Potassii Bicarbonatis	2.40 Gm.	gr. xxxvi
Sodii Boratis	2.40 Gm.	gr. xxxvi
Thymolis	0.06 Gm.	gr. i
Eucalyptolis	0.12 cc.	m. ii
Methylis Salicylatis	0.06 cc.	m. i
Tr. Persionis	2.40 cc.	m xxxvi
Alcohol	6.00 cc.	℥ iss
Glycerini	12.00 cc.	℥ iii
Aquae. Dest. <i>q. s. ad</i>	120.00 cc.	℥ iv

M.

Filtrā—Talc. Purif.

Sig: Use with equal parts of water for mouth rinse.

Note: Alkaline mouth wash—use plain or diluted. May be obtained by writing for Liquor Aromaticus Alkalinus N. F.*

*N. F.—National Formulary, p. 221.

(h) R _x	Metric Approx.	Apoth. Equivalents
Sodii Boratis	3.6 Gm.	gr. lvi
Sodii Bicarbonatis	3.6 Gm.	gr. lvi
Phenolis Liq.	0.72 cc.	m. xii
Glycerini	8.4 cc.	m. cxxxvi
Aqua Dest. <i>q. s. ad</i>	240.0 cc.	℥ viii
Misce.		
Sig: Tablespoonful in glass of water as a mouth wash.		

Note: Write for by official title.

Liquor Sodii Boratis Compositus, N. F.*
Dobell's Solution.

For dental spray bottle, dilute 5 times with water.

*N. F. = National Formulary, p. 242.

Suggested Letter

The Hale Prescription Pharmacy

Lowell, Massachusetts

June 26, 1940

(f) R _x	Metric Approx.	Apoth. Equivalents
Mentholis	0.12 Gm.	gr. ii
Thymolis	0.12 Gm.	gr. ii
Saccharini Solubile	0.09 Gm.	gr. iss
Eucalyptolis	0.60 cc.	m. ix
Methylis Salicylatis	0.12 cc.	m. ii
Alcohol	38.00 cc.	℥ ixss
Aquae Dest. <i>q. s. ad</i>	240.00 cc.	℥ viii

M.

Filtrā talc.

Sig: Dilute with equal parts of water for mouth wash.

Note: Base mouth wash to which other ingredients may be added.

To change flavor replace Eucalyptus with Oil of Sassafras, and Methyl Salicylate with Oil of Anise.

Dilute or not for office atomizer.

Alcohol—approx. 15%.

FLAVORED SODIUM PERBORATE

(g) R _x	Metric Approx.	Apoth. Equivalents
Sodii Perboratis	120.00 Gm.	℥ iv
Carminc No. 40	0.30 Gm.	gr. v
Olei Cinnamomi	2.50 cc.	m. xl

Misce.

Dispense in glass bottle.

Sig: Use as tooth powder or dilute with three parts of water as mouth wash.

Note: Sodium perborate is recommended only in treatment of diseased conditions under professional supervision.

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

The fifth series of dental prescriptions calls for a variety of mouth washes and tooth powders.

May I draw your attention to Mouth Wash No. 3? It may be used plain or medicated in accordance with your wishes. Used plain, it is a pleasant-tasting mouth rinse. Many dentists use it daily at the dental chair. The value of medication in mouth washes is questionable. However, medication is commonly placed in mouth washes. Such substances as Resorcin, Zinc Chloride and Zinc Phenol-sulfonate are quite commonly used in concentration up to one per cent. The color and flavor in mouth washes may be changed at the discretion of the prescriber.

Tooth powders and liquid dentifrices have become popular again. Dentists are recommending formulas for these preparations to their patients. The formulas suggested will be found very efficient. Patients appreciate having their dentist prescribe a cleansing agent for the teeth and for their own special use. Again, the color and flavor of these preparations may be changed at the discretion of the prescriber.

The formula for a saline mouth wash is a very pleasant one. A small amount may be dissolved in water and it is ready for use. It makes a less bulky package than a liquid preparation and will be found convenient when traveling or on a vacation.

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

U. S. P. Interim Revision Announcement No. 2 Concerning the U. S. P. XI Standards for Surgical Gut (*Chorda Chirurgicalis*)

On the recommendation of the Committee of Revision of the U. S. P. XII, and with the approval of the Board of Trustees, the enforcement of the standards for Surgical Gut, which were announced in the Second Supplement to the U. S. P. XI, are postponed until January 1, 1941.

These standards were to become official on July 1, 1940, but because of the discovery that considerable stocks of Surgical Gut, conforming to the new Pharmacopœial standards with respect to their diameter, tensile strength and sterility, but not labeled in accordance with the new official requirements, were still in the hands of dealers, the action reported above was taken by the official Pharmacopœial Committee and Board. Since this Surgical Gut could be used with entire safety it was deemed unwise and unnecessary to render the stocks unsalable and therefore cause a large financial loss.

It is understood, therefore, that the Pharmacopœial standards for Surgical Gut as set forth in the Second U. S. P. XI Supplement, pages 40 and 41, will become official on January 1, 1941.

E. FULLERTON COOK,

General Chairman, U. S. P. XII Committee

E. F. KELLY,

Chairman, Board of Trustees of the U. S. P. XII
May 15, 1940

Dr. George W. McCoy will retire from the U. S. Public Health Service on June 30th, after forty years' active service. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1898 and served his internship at the City Hospital, Newark, N. J. In 1915 he became director of the Hygienic Laboratory, now the National Institute of Health, in Washington, D. C., where he served until 1937. He represented President Roosevelt at the dedication of the AMERICAN INSTITUTE OF PHARMACY in May 1934, delivering an address. Since 1937 he has been engaged in epidemiological studies on leprosy and since 1938 has been director of the department of preventive medicine and public health at the Louisiana State University School of Medicine, New Orleans. Dr. McCoy represented the United States on the Permanent Standards Commission of the Health Section of the League of Nations, has been a member of the Council on Pharmacy and Chemistry of the American Medical Association, and of the U. S. Pharmacopœial Revision Committee since 1920. In 1931 he was awarded the Sedgwick Memorial Medal of the American Public Health Association.

NOTICE

Will any one having a copy of the May Practical Pharmacy Edition, which he does not need, please mail same to the AMERICAN PHARMACEUTICAL ASSOCIATION, 2215 Constitution Ave., Washington, D. C.? This courtesy will be greatly appreciated, as unprecedented demand has utilized our surplus.

Appointment has recently been made of Mr. Guy H. Trimble, as Chief Pharmacist and Assistant Hospital Administrator, Health Division, Indian Service, U. S. Department of Interior.

Mr. Trimble is a graduate of the University of Pittsburgh, class of June 1920. He is registered in Pennsylvania, Washington, D. C., and Virginia. He has been with the Department of the Interior for five years.

The Indian Service has large hospital units giving care to an average of 61,000 patients a year in their ninety-five hospitals in the U. S. A. and seven hospitals in Alaska. The annual appropriation to keep up these hospitals amounts to about \$3,000,000, which is annually growing.

Dr. J. Allen Reese will become Dean of the School of Pharmacy of the University of Kansas in September, succeeding L. D. Havenhill, retired. He comes to Kansas with a highly successful record as a member of the pharmacy staff of the Medical College of Virginia. He is considered one of the outstanding men in pharmacy to-day. Two high honors came to him at the recent convention in Richmond. He was elected chairman of the Conference of Pharmacognosy and Pharmacology teachers of the American Association of Colleges of Pharmacy for next year and a member of the Revision Committee of the U. S. Pharmacopœia for the next ten years.

North Dakota State Pharmaceutical Association met for the 55th time in Dickinson, June 16th to 18th. Among the speakers were: Culver S. Ladd, Food and Drug Regulatory Department, Bismarck, "Labeling Requirements under the New Drug Laws;" Dr. C. E. Miller, "Isotonic Solutions;" Prof. Mattys Jongeward, "Keeping the U. S. P. and N. F. Up to Date;" Irving Grover, Northern Drug Co., "Business Management and Accounting;" E. A. Spika, Johnson & Johnson; Leo Flanedy, Parke, Davis & Co.; Marvin Schofer, Weco Products; and R. C. Brewster, Sales Manager, E. R. Squibb & Sons, Chicago, "Help Wanted—Salesman." The convention was worth while and much good was accomplished.

Paradoxical Posology*

By Wilbur L. Scoville†

The above caption attests that (1) because of a compromising attitude on the part of the U. S. Pharmacopœia and the National Formulary regarding the metric system, and (2) because of variance with the American Medical Association, the AMERICAN PHARMACEUTICAL ASSOCIATION and the spoon-makers regarding the domestic measurement of common liquid remedies, (3) the pharmacist is in a precarious position with regard to his responsibility for the doses of potent remedies in liquid mixtures.

The Metric Versus the Apothecaries' Measures

The U. S. Pharmacopœia first adopted the metric system of weights and measures for use in formulas and other purposes in its seventh edition. No doses were included in this edition and in most of the formulas the decimal system was consistently observed. In the eighth edition, authorized by the Convention of 1900, doses were introduced and a compromising attitude appeared. Instead of adhering to normal decimal divisions, in harmony with metric apparatus, in which the graduated apparatus emphasized the 5, 10, etc., decimal subdivisions, and pipettes are made for 1 cc., 5 cc., 10 cc., etc., deliveries, the Pharmacopœia adopted 4 cc. as the basic standard of dosage for liquids which are usually directed to be taken in spoonful doses. The National Formulary followed suit in its fourth (1906) edition.

This led to a calculation of compound formulas to provide for even units of dosage in the apothecaries' system and the metric formulas were made to call for metrically odd quantities of active substances, such as 17.5 Gm. in 1000 cc., in order to provide for 0.065 Gm. or 1 grain in each 4 cc., and similar odd amounts. The thought underlying these formulas was the apothecaries' system but the expression was in the metric system. In reality the metric system was made subsidiary to the apothecaries' system. That the physician and pharmacist would continue to think in the apothecaries' system even though using metric quantities was the compromising motive. As in most compromises less thought was given to what was being given up than to what was to be gained. And even yet the cost of this compromise is not generally recognized.

The Official Teaspoonful

The eighth, ninth and tenth editions of the Pharmacopœia stated in the Preliminary Notices that a teaspoonful was to be considered as the approximate equivalent of 4 cc., or 1 fluidrachm. The National Formulary consistently accepted these standards and did not deem it necessary to duplicate the state-

ments. The eleventh edition of the U. S. P. discontinued the direct statement but implied that it continued to regard those quantities as the correct amount to be reckoned as a teaspoonful for medicinal purposes or by adhering to the 4 cc., or 1 fluidrachm basis of dosage. Thus both of our official guides give warrant to physicians and pharmacists to calculate doses on this basis.

The Teaspoonful in Fact and Practice

In 1902 M. I. Wilbert reported, after a considerable number of experiments made at the German Hospital, Philadelphia, that teaspoons were found to vary in capacity from 3 cc. to 7 cc. each, and that medicine glasses graduated for teaspoonful doses were found to vary from 2.6 cc. to 6.4 cc. He found the general average of the teaspoons, eliminating the especially small and large, showed a capacity of 4.4 cc. to 5.5 cc.

In 1917, H. V. Arny reported on tests of nine teaspoons, carefully selected to represent ordinary and average use, as having capacities of 3.8 cc. to 7.8 cc., but that a true average capacity was found to be near to 5 cc.

In 1924, J. L. Adams reported finding four teaspoons of different makes to vary from 4.2 cc. to 7.4 cc., but that two of the four held 5.4 cc. each.

In 1934, F. W. Nitardy reported that of six different teaspoons of different makes and grades, five were found to contain 5 cc. each and one 5.5 cc.

It is significant that each of these four investigators, working independently and with spoons of their own selection, agree that the average teaspoon in household use holds close to 5 cc. and the later experiments show a closer agreement than the earlier. Evidently the spoon manufacturers, either consciously or unconsciously, have adopted 5 cc. as the standard of capacity of the teaspoon.

It is also worth noting that the first investigator mentioned, Mr. Wilbert, was a hospital pharmacist, and that hospital practice tries out new remedies and keeps records, so as accurate a measure of the doses given as may be practicable is necessary for the conclusions. And the last-mentioned investigator, Mr. Nitardy, is superintendent in a large drug manufacturing plant and he wants to know what he should put on the labels of his products—or omit from them. Then observe that the drug manufacturers almost invariably omit any reference to teaspoonful or drachm doses but give the content of active ingredient in liquid mixtures as so much in a fluidounce. Governmental regulations for narcotics also use the fluidounce basis.

Variant Authorities

In 1902 the AMERICAN PHARMACEUTICAL ASSOCIATION adopted a resolution to the effect that "the

* Presented before the Section on Practical Pharmacy and Dispensing, A. PH. A., Atlanta meeting, 1939.

† Box 176, Gainesville, Florida.

following equivalents be recommended: One teaspoonful equals 5 cc.; one dessertspoonful equals two teaspoonfuls, or 10 cc.; one tablespoonful equals three teaspoonfuls, or 15 cc." This resolution was endorsed the following year by the American Medical Association. Thus these authorities are not in recorded agreement with our official standards.

The Pharmacist's Quandary

This anomalous condition puts the pharmacist in a quandary which may be serious in its consequences. He is legally responsible if he dispenses a prescription the dose of which is normally dangerous, and it may make a serious difference, when the directed dose is in teaspoonfuls, whether he calculates eight doses to the fluidounce or six. In the latter case the dose of the potent ingredient will be 25 per cent larger than in the former.

For illustration let us take a hypothetical but reasonably probable prescription. A physician wishes to administer to a patient what may be considered as maximum doses of strychnine sulfate for a few days. He writes the following prescription:

R Strychninae Sulf. 4/5 gr.
Elixir Aromat. ʒii
M. Sig: One teaspoonful three times a day.

The physician presumably has calculated that the patient will get sixteen doses and that will mean $\frac{1}{30}$ grain of strychnine sulfate in each dose.

The pharmacist knows that the patient is much more likely to take it all in twelve (5 cc.) doses, which means $\frac{1}{11}$ grain of strychnine sulfate at a dose. He may judge the $\frac{1}{30}$ grain dose to be reasonable, but questions the $\frac{1}{11}$ grain dose.

If he calls up the physician and questions the dose he risks an unpleasant controversy and a possible loss because each has authority for his position and each some right to choose the authority under which he will act. If he elects to avoid a controversy and dispense without question he accepts full legal responsibility for his action.

Now what is likely to happen? Strychnine is a cumulative poison. The first few doses may stimulate the patient and indicate benefit. Then some

unpleasant symptoms may begin to develop: a dull headache, low in the back of the head; trouble in controlling muscles around the mouth; nervous jerking, etc. The doctor is consulted, recognizes the symptoms as those of incipient toxicity and quite naturally protects himself by concluding that the pharmacist made an error in compounding. The patient recovers, but what about the pharmacist? He may be sued for malpractice; then he has an expensive and weakened defense to make. There may be no lawsuit, but the news is spread around, his reputation and his business suffers, and he is denied a sufficient defense. He is a victim of variant authorities and doubtful amenability. Surely the pharmacist is entitled to better protection and a more certain authority.

What Should Be Done

The next editions of the U. S. P. and the N. F. should each state that, for medicinal purposes, a teaspoonful shall be regarded as approximately 5 cc. These statements are desirable as declaring a change from the former standard, would be in agreement with the American Medical Association and the AMERICAN PHARMACEUTICAL ASSOCIATION, and would do away with any doubt as to how doses should be calculated in prescription practice.

But this alone is not enough. The notice may not be read by all possessors of the books and if read is easily forgotten. More emphasis is needed to bring the change into prompt and general use.

This can and should be accomplished by changing all 4 cc. average doses to 5 cc. with the corresponding change in the apothecaries' system, to fit the facts. This will call for a readjustment of some of the formulas to maintain the same dosage of active ingredients, unless the larger dose is considered desirable.

The important consideration, however, is to stress by repeated implications the fact that 5 cc. (and its apothecaries' equivalent) is the right quantity for the calculation of teaspoonful doses. The reiterated statements of 5 cc. average doses will be more effective in calling attention to the right basis for calculation than any other means.

Wyoming Pharmaceutical Association met in Casper, June 7th and 8th, for the celebration of their Silver Anniversary. Among those on the program were: Al C. Fritz, President of the N. A. R. D.; E. N. Freeman, McKesson-Ogden Wholesale Drug Co.; John B. Tripeny; George D. Prigmore, "Business Cents;" Frank L. Korfanta. The meeting was very helpful, the attendance good and the entertainment features enjoyable.

New York State Pharmaceutical Association met for the sixty-second time, at Bolton Landing, Lake George, June 17th to 21st. Among those partici-

pating in the program were: A. C. Nielsen, President, A. C. Nielsen Co., "Drug Marketing;" Dan Rennick, of *Drug Topics*, "The Cosmetic Bar;" J. M. Considine, United Drug Co., Boston, Mass., "Salesmanship;" Joseph Bander, McKesson-Robbins, New York City, "Don't Let the Dime Pass by Your Store;" Hon. Theodore Christianson, Director of Public Relations, N. A. R. D., "The Retail Druggist in 1940." The program, attendance and entertainment features were all good; and altogether the convention was deemed successful and showed progress.

The Pharmacy of Vitamin B₁*

By Louis Greengard†

Modern pharmacy consists largely of pouring the products of other men's labor and skill from one bottle into another. Just as a muscle atrophies from disuse, so do bodily functions and faculties atrophy. The student may complete a thorough course in pharmacy, and, after years of pouring ready-made pharmaceuticals, not only lose his enthusiasm for the work, but will actually forget a great part of what he has learned. I have therefore made it a policy to produce in my own laboratory as large a proportion of my pharmaceuticals as possible. Accordingly when Elixirs of Thiamin Chloride appeared on the pharmaceutical horizon, we set to work to produce one of our own.

We have dispensed a great deal of this valuable drug, and in a number of combinations. I have found it necessary to seek information regarding its incompatibilities, many times. I have found, however, that while the medical profession has done an efficient job in working out the pharmacology of Thiamin Chloride, we in pharmacy have been slow in determining and putting on record its incompatibilities. At least, I could not find them so recorded. I therefore decided to take this opportunity to present to the pharmaceutical profession a compilation of those facts already recorded, together with those I have been able to find by experimentation.

In making elixirs of Thiamin Chloride the pharmacist should always bear in mind that aqueous alcoholic solutions of Thiamin Chloride precipitate as Thiochrome upon standing at room temperature for several months (according to Kinnersley, O'Brien and Peters), as quoted by Merck in "The Story of Vitamin B₁."

For this reason Elixirs of Thiamin Chloride should be prepared in the laboratory of the prescription pharmacist, not necessarily extemporaneously, but at least in such quantities as will insure its being dispensed and consumed by the patient within sixty days after date of preparation.

Merck states that very little Thiochrome is formed at pH 2, but is produced more rapidly as pH nears 7. Since no elixir can be very acid, the pH must necessarily be close to pH 7, and it therefore follows that the precipitation of Thiochrome must occur.

Thiochrome is practically harmless, but the patient is getting no Thiamin Chloride, and is merely paying a high price for a pleasantly flavored inert drink.

Both the physicians and manufacturing pharmacists appear to have accepted a wine base as the most satisfactory vehicle for the administration of Vitamin B₁. This is due partly to the extreme palatability of the ensuing product, but also because the Thiamin Chloride is more stable in an acid medium.

However, all wines contain a certain amount of tannic acid. Tannic acid precipitates Thiamin Chloride, probably in the form of a tannate. The same problem occurs here as in the case of the Thiochrome precipitation. The pharmacist in dispensing this decants the liquid on top, leaving the precipitate in the bottom of the bottle, and the patient gets a drink of wine at a fancy price, with no medication.

For this reason, while we may continue the use of a wine base, the wine should be completely detannated before adding Thiamin Chloride. This can be done by the use of freshly prepared casein or completely defatted and dealbuminized milk.

Aqueous or weak alcoholic solutions of Thiamin Chloride, upon standing, will develop a mold. This can be prevented by using 1/10 per cent benzoic acid. Thiamin Chloride is adsorbable by charcoal and kaolin, and therefore should not be administered simultaneously with either of them.

Thiamin Chloride reacts to nearly all of the alkaloidal precipitants with the exception of the bromides, which make no change, and the hydroxides. The hydroxides, however, do decompose it, as is evidenced by the yellow color produced. In most cases, since the solutions of Thiamin Chloride are so dilute, the precipitate does not develop for several days.

Incidentally, Dr. Lascoff, in the May 22nd issue of *Drug Topics*, states that the bromides of Strontium and Ammonium tend to be broken up by acids and acid salts, and therefore should not be dissolved in Elixir Thiamin Chloride, but should be administered separately.

The following is a list of incompatibilities: Bichloride of Mercury, the iodides, the carbonates, the bicarbonates and acetates produce white precipitates. Ferrous sulfate precipitates a yellow crystalline precipitate. Tannic Acid and Iron Ammonium Citrate produce brown precipitates. Iodine produces a reddish brown precipitate.

Upon mixing solutions of sodium bicarbonate and tannic acid and adding this to aqueous solution of Thiamin Chloride, a heavy curd-like precipitate was formed. Sodium Phosphate, Sodium Borate and Fowler's Solution produce slight whitish precipitates. Phenobarbital Sodium produces a white crystalline precipitate, so that when Phenobarbital is desired in combination with the elixir, Phenobarbital and not the Sodium salt should be used, as the Sodium salt is not only incompatible with the vitamin, but is also decomposed by the acids which are present in the wine.

In view of the number of reactions recorded it would be advisable that the Elixir Thiamin Chloride be combined with other drugs, chemicals or preparations with due consideration of possible incompatibilities.

* Presented before the Conference of Professional Pharmacists, A. Ph. A., Atlanta meeting, 1939.
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An Unusual Feature of the University of Washington Method of Teaching Dispensing Pharmacy*

By Elmer M. Plein† and L. Wait Rising‡

The University of Washington is entirely orthodox in its didactic presentation of the material in dispensing pharmacy. In the laboratory work, however, it would appear from a study just completed by the Problems and Plans Committee of the American Association of Colleges of Pharmacy, that the records kept by our students are more extensive than ordinary. Because of this fact, and also because we feel that the student gains more from his work in the matter of appreciation and understanding of practical drug store routine, his legal responsibilities, and the economic significance of the prescription, both to himself and to the patient, we are publicizing our procedure hoping that it will be helpful to other institutions.

Our beginning course is composed of sixty-six didactic hours and ninety-nine laboratory hours; and the advanced course is composed of ninety-nine didactic hours and one hundred sixty-five laboratory hours. It is in the laboratory work of the advanced course that our students gain the experience which they would not get in the average course. This experience, as has already been noted, is in the keeping of certain records.

The prescriptions for the student's file come from two sources—those to be filled in the dispensing pharmacy laboratory and those which he only studies, and which are found in the demonstration pharmacy. All are copied in a notebook (next year a regular file will be kept by each student just as is done in the drug store), given the correct serial number, dated, initialed (as of the compounder) and priced according to either the Pacific Drug Review or the N. A. R. D. schedules. In recording the price on the prescription, BLACK HORSE is used as the code. Occasionally the student is asked for a copy of a certain prescription which he has in his file. He then makes the required copy on a University of Washington prescription blank and records the price to the patient in the N. A. R. D. code just as he would do in a retail pharmacy.

Some narcotic prescriptions are filled which are filed separately in the notebook, as a narcotic file, but continued with the consecutive serial numbers as of the regular file. A numbered blank is placed in the regular file to indicate the reason for the missing prescription. At the beginning of the laboratory course the student is given a narcotic inventory taken from one of the retail stores in Seattle. Throughout the year he keeps a perpetual narcotic inventory by recording the amounts of narcotics used on the prescriptions and theoretical

purchases which are posted on the bulletin board.

Since many prescriptions call for proprietaries our students are admitted to the demonstration pharmacy where each week they find on the prescription file about ten or fifteen new prescriptions calling for these substances. The student then goes through the regular dispensing-pharmacy technique as far as possible without actually compounding the prescription and labeling the container. These prescriptions are filed in the notebook along with those actually compounded in the laboratory continuing the same serial numbers. The student supposes that each item handled in the demonstration pharmacy is the last one in stock and makes note of such items in his want book. In addition to the name of each item he records the quantity to order, the price, the manufacturer and his address, the name of the analogous official preparation, if any, the various sizes obtainable and the various ways in which the preparation might be administered.

Recording the Cost of Prescriptions

An itemized cost of the prescriptions filled is kept in a tabulated form which requires a list of the ingredients, their stock unit cost, and prescribed quantity cost, the containers and their costs. The overhead is neglected because that item is cared for by the pricing schedule. The form of this record is shown below.

"Prescription cost record."

Prescription Number	Ingredients	Cost		Container, Label, etc.	Total B Cost
		Stock Unit	Amount in B		
—	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—

The tabulated cost data give the student a breakdown of what each prescription means from an economic point of view. It gets an added significance as a result. Inspection of the form will make the value of it obvious as an important statistical control on that phase of professional business.

Daily Work Sheet

The daily work sheet is another record kept by the student and has in it the following information: the date on which the prescription was filled, the prescription number, the cost price, the selling price, the doctor's name, the patient's name and the compounder's initials. This gives him at a glance a picture of each day's prescription business.

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‡ Professor of Pharmacy, University of Washington.

Two other very important records are the exempt narcotic register and the poison register which are of the conventional form. From time to time the student gathers his information from the bulletin board for these registers and records it in the proper place in his notebook.

The records kept are summarized as follows:

- (1) Prescription File (includes prescriptions filled in the laboratory and prescriptions filled theoretically in the demonstration pharmacy)
- (2) Narcotic Prescription File
- (3) Narcotic Inventory
- (4) Want Book
- (5) Itemized Cost of Prescription
- (6) Daily Work Sheet
- (7) Exempt Narcotic Register
- (8) Poison Register

Value of the Training

We appreciate that keeping these records soon becomes routine, and to many students it is tedious. However, a business cannot be run without knowledge of where and in what manner it is running, if it is to be properly controlled and decently profitable. There is no time so suited to impressing this fact on members of the profession as during their period of academic preparation. The most effective way to utilize the opportunity is to require the keeping

of enough records to make the individual, when he sees a prescription, automatically begin an audit of the document. Then, when he gets out of school and in practice for himself he will as a matter of course set up an intelligent record system most practical for his individual needs.

Our system is designed to create an impression of the value and need for such statistics which will not be as ephemeral as much academic bric-a-brac. It is a basis upon which to build in after years. We do not claim it to be complete or perfect for use in every prescription pharmacy, but as a good solid academic tool it functions admirably.

Another feature of our course is a work sheet kept by the teaching staff. This is valuable to the extent that it shows by simple inspection how many prescriptions the students have filled in any given period of time and the number of prescriptions of any certain class (such as ointments or collyria) they have filled. This work sheet carries twenty-one columns, one for each class of preparations. At the left of the table is listed the number of the prescription and a note as to the kind of preparation. In each of the various columns is listed the quantity of the preparation made and the size of containers necessary. Provision is made also to note the incompatible and narcotic prescriptions filled, as well as the demonstration pharmacy prescriptions, which are studied only.

Association for the Advancement of Professional Pharmacy

The last meeting of the Association was held on Tuesday evening, April 30th, at the Hotel Empire, New York City. The topic of the meeting was the A. A. P. P.'s proposed "American College of Apothecaries" which was presented before the Conference of Professional Pharmacists which met during the Convention of the AMERICAN PHARMACEUTICAL ASSOCIATION at Richmond, Va. Cyrus Hakes, Chairman of the Constitution Committee for the proposed "American College of Apothecaries," reported that it was the purpose of this proposed College of Apothecaries which it is hoped might be affiliated with the AMERICAN PHARMACEUTICAL ASSOCIATION to represent pharmacy in professional prestige just as the American College of Physicians and Surgeons represent medicine and the American College of Dentists represents dentistry. Final arrangements were made at this meeting for a large delegation to attend the A. P. H. A. Convention to assist Dr. Leonard J. Piccoli, President, in the presentation of the proposed American College of Apothecaries before the Conference of Professional Pharmacists.

On May 28th, at 8:30 p.m., Hotel Pennsylvania,

there will be a Joint Informal Meeting arranged by a committee representing the various metropolitan county medical societies and the above association. The topic for the evening will be, "Medicine and Pharmacy in the American Health Program."

The following speakers will be heard: Dr. Terry M. Townsend, President of the Medical Society of the State of New York; Dr. Nathan B. Van Etten, President-Elect of the American Medical Association; Dr. Robert L. Swain, Past-President of the AMERICAN PHARMACEUTICAL ASSOCIATION and Editor of *Drug Topics*; and Dr. Evander F. Kelly, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION and Editor of the *Practical Pharmacy Edition of its JOURNAL*.

This meeting was the first of its kind in that both medicine and pharmacy were represented to express the various viewpoints on socialized medicine jointly.

During this meeting U. S. P. and N. F. preparations prepared by sixteen members of the A. A. P. P. were exhibited and discussed with physicians.

Working Hours in Pharmacy*

By John F. McCloskey†

In these days of modern, streamline, made-to-order plans for almost everything, including working conditions, it is hard to realize why pharmacy leaders fail to attempt to remedy one of our worst evils—long hours. Possibly some sort of legislation would remedy it, but legislation is not going to be enacted for any group who claim exemption from other labor problems because they are desirous of maintaining the dignity of professional men.

I am glad that legislation has not been resorted to because we have legislated upon practically everything else pertaining to pharmacy and soon we will be so completely governed by laws and regulations that there will be nothing left to express our individuality, our ingenuity or any measure of freedom.

The so-called "Socialization" that is occurring in the United States is about as near perfect in pharmacy as it could be, since all of our operations, many of our prices and our personnel are state or federal regulated. The only things we have been exempt from as far as I know in the mass of state and federal laws, have been working conditions, hours and wages, and these are our primary problems in some respects.

Pharmacy's Major Problems

Let us enumerate the major problems that face pharmacy, and these, to a great extent, may have hampered our progress, and prevented the profession from drawing into its ranks students from the higher brackets in the high schools.

As a deterring factor to the study of pharmacy we might list the money earned as wages and salaries, and the working hours. Then in order would follow—working conditions, personnel now engaged in the profession, competitive conditions under which the profession must operate, restrictions and legal requirements of city, state and federal agencies, the current and general opinion of the profession by the public. The educational requirements formerly so low are now not much of a factor, but we must consider education on the basis of the return obtained after four years of study, the status of the college of pharmacy in the educational institution and its general rating with other departments of the university.

What a Physician Does

I visit for a few weeks at a time every year a physician who has developed a wide and profitable practice because he has adopted certain policies which he follows. He believes he must be physically

fit and alert, pleasant and up-to-date in dress and familiar with current news, shows and fads. He places foremost his ability to keep abreast of advances and changes in medicine by wide reading, doing a little research work and attending conventions, clinics and postgraduate courses.

He seldom answers the telephone when he is at home. His wife, or in her absence the servant, answers and they request the caller's name, address and telephone number and listen to what the caller has to say. The caller is then informed that the doctor is not at home and that the information will be given when he returns or calls. In many cases the wife, a very tactful person and well versed in laymen's medicine, can offer advice if asked or can detect the urgency or lack of it for a visit by the doctor.

Now most of the time the doctor is sitting in the room when the call comes. If he finds it is a person he never treated or does not know, he seldom answers the call. Likewise, the hour at which the call is made and from what locality it comes sometimes serves as a guide as to the desirability of answering. He says that once he answers the call he is bound to follow it through to conclusion, but there is no rule of ethics or law that compels him to answer his telephone. He has found that such calls are seldom as important as the patient believes them to be, that most of them demand much time, that such patients fail to follow advice or to get prescriptions filled when given to them and, worst of all, that they fail to make any attempts to pay their medical bills.

Many of the callers have questioned, "What is wrong with all of the doctors, are they all out?" or stated, "This is the third or nth doctor I've phoned." Little do they realize that they have brought this condition upon themselves and that the medical men learn of the "dead beats" just as do the business men, both of them all too late.

I asked Doctor X why he refused so many calls and why he did not attempt to build up a larger practice. He replied that if he were out running around all night on every call that came in, he would wear himself down and be unable to care for those who needed and appreciated his service. He said his office hours are well known and that few calls are emergency messages. The people who have been softened by too much service have failed to appreciate it, do not want to pay for it and do not want to inconvenience themselves for it. The telephone is such a handy instrument that it is abused.

Is the doctor's policy wrong? We have evidence that it cannot be wrong for his practice continues to grow and he is getting paid for his services. He is becoming known as an outstanding doctor. I believe his policy is correct, for he has time for him-

* Presented before the Section on Pharmaceutical Economics, A. Ph. A., Atlanta meeting, 1939.

† Dean, Loyola University, College of Pharmacy, New Orleans, La.

self, his family, his journals and his work. He is free to exercise, to enjoy life and to be fit physically and mentally.

Pharmacy Giving Too Much Service

The long hours of pharmacy are similar to the unwelcome telephone calls to this doctor. We try to give every possible service. We are open 14 to 16 hours every day, Sundays and holidays included. We work ourselves down until we are easily irritated. We fail to see the brighter side of life. We have no time for play, reading, hobbies or study. We have not learned that we cannot serve everyone and please all. Then why try to do it by the multitude of non-profitable services we render, among them the excessively long hours of work?

I do not have the solution to the problem, but I

do believe that if store owners were more closely affiliated, would take enough time off from their work to meet in frequent conferences and discuss this and similar problems, there is enough intelligence and sound reasoning ability among them to find a plan.

Confidence in your fellowman, the ethics of the profession and gentlemen's agreements are oftentimes more successful, more beneficial and more easily enforced than legislation.

I would like to see this Section take the initiative in publicizing this evil and showing how it can be remedied to the benefit of all, financially and physically. Of course we would have to do a fine piece of educational work, the kind that may be called propaganda if need be, to sell the idea. I believe it can be done and that pharmacy will benefit.

Prescriptions for the Skin Patient

The AMERICAN PHARMACEUTICAL ASSOCIATION, New York Branch, at its April 8th meeting scheduled Dr. Herman Goodman, New York dermatologist and author of several books on the skin in health and disease. Dr. Goodman analyzed 119 prescriptions for skin patients in drug store files during the fall of 1939. They were not selected but taken in order. The physicians were general practitioners and skin specialists. Five prescriptions were for internal administration: mixed treatment, twice; vitamins, once; and tin oxide tablets, twice. External applications included 8 powders, 43 liquids and 63 greases. The total number of ingredients was 88. They appeared 35 times in the powders, 156 times in the liquids and 187 times in the grease prescriptions.

The ingredient which appeared most often was salicylic acid, found in 25 prescriptions. Phenol and menthol were noted alone or together in 41 prescriptions. Zinc oxide was ordered for 20 prescriptions. Boric acid was prescribed 14 times; ammoniated mercury, 12; resorcin, 11; and resorcin monoacetate (euresol), 8 times. Alcohol appeared in 15 prescriptions; aquaphore, 13 times; rose water, 13; lanolin 11; and petrolatum, 8 times. *Calamine preparata* was ordered 11 times, usually with zinc oxide.

Prescription blanks signed by physicians called for proprietary remedies in six instances, and could be regarded as reminders rather than as orders on the pharmacist.

Sulfur was named only four times in the 119 prescriptions. There were two additional orders for *lotio alba*; one for Vlemineckx' solution, one each for proprietary solid *lotio alba*; and a proprietary Kummerfeld's lotion. Sodium thiosulfate was found twice.

There were 35 ingredients which appeared but once in the analysis. The tendency is to name the entire formula instead of writing the individual ingredients and quantities with directions for com-

pounding. Whitfield's ointment is given as an example. Many physicians left the arithmetic to the pharmacists by prescribing a number of ounces of a per cent concentration; as ammoniated mercury, 3 per cent in ointment to an ounce.

Shell Collection and Building Donated to Rollins College by Two Pharmacists

Dr. James H. Beal, of Merritt Island, Fla., has given his remarkable shell collection which represents the work of over fifty years and includes thousands of rare and beautiful shells gathered from every part of the world, to the college. It will be housed, according to a recent announcement, in a building to be erected on the campus with funds donated by B. L. Maltbie, Altamonte Springs, Fla., and Newark, N. J., founder and present chairman of the board of the Maltbie Chemical Co., Newark, and a former president of the American Pharmaceutical Manufacturers' Association.

When finally assembled here, and exhibited in its new building, the Beal collection will probably represent the finest shell exhibit of its kind in the world, Edward M. Davis, director of the Thomas R. Baker Museum at Rollins said, when the gift was announced.

The new building, which will be completed by next fall, will be a one-story structure and will contain a 35 x 65-foot exhibition room, and a large lobby.

Prescription Pricing Survey*

By Emil C. Horn†

It is quite generally conceded that the public has reason to wonder about the variation in prices of identical prescriptions. These price differentials definitely place the profession in a bad light and where one pharmacist prices by guess or according to the size of container, ignoring cost of ingredients and time involved in compounding, he naturally will be out of line with the pharmacist who follows a pricing system. We found prescriptions for Fair Traded specialties filled for less than the prescribed minimum which in itself is sufficient reason to warrant a vigorous attempt at systematic pricing.

To definitely determine the variation in prescription pricing and to verify the necessity of a pricing program, our ASSOCIATION sponsored a survey which revealed some exceptionally interesting information.

Believing our procedure possessed some unusual details, we are pleased to pass on our experience for the good of pharmacy with the hope that it will benefit and encourage others to sponsor a movement along similar lines in their own locality.

The need of a program of this nature was further established after we learned from the local wholesalers what per cent of their accounts fell into the following brackets: Involuntary C. O. D.; credit limit of \$100 and \$200; and unlimited credit. We averaged these figures submitted to arrive at our percentage. When the per cent in the first bracket was announced the entire audience seemed to appreciate the timely need of a plan to level off a rough spot in our economic position.

How the Survey Was Made

A set of twelve representative prescriptions was sent to each pharmacy in the county with a request that each be priced according to the store's schedule and returned for tabulation anonymously since the identity of the store was irrelevant. A self-addressed stamped envelope was not furnished since we wanted to learn how many were sufficiently interested to bear the inconvenience and expense of returning the questionnaire.

The response was quite gratifying since our replies reached 29%. The returns were not accessible to anyone except the writer and all information was withheld for a definite reason.

Ten days after the mailing, the figures were tabulated showing high, low and average price on each prescription. Ten pharmacists, representing all types of stores and all type neighborhoods, were invited to participate in a special meeting to draft a suggested schedule and make recommendations. I would like to emphasize that we had 100% attendance at this meeting. It was unanimously agreed

as the first order of business that the identity of the committee personnel be kept secret for our own protection and to encourage a free expression of thought and frank discussion.

All present participated in a general discussion of various pricing schedules which we had selected and of the information required to create a generally accepted program. We discussed a recommended wage scale for time, minimum price on any prescription, advisability of container charge, on which unit purchase price was to be computed, mark-up on proprietaries, broken package price, customer price on popular preparations, etc. After settling these points with separate ballots everyone was well into the purpose of the meeting.

Each prescription on the questionnaire was then individually considered and after a thorough exchange of opinion a ballot was taken to determine a recommended price to be presented to our members. After the committee agreed on a price, the high, low and average of the survey was revealed. It was interesting to note the relationship of the committee's recommended price to the average price charged.

To get an idea of how much time was necessary to prepare average ointment, powder and capsule prescriptions, we had three pharmacists fill identical prescriptions, noting the amount of time required and accepted the average as proper for that type of operation in calculating the charge for time.

Contacts with Non-Members

Our next step was a shopping tour of non-members stores. Four prescriptions from our questionnaire were filled at the local chain and department stores. This revealed the type of prescription work they did, the price they charged and the appearance of the parcel for customer delivery. Generally the mixtures were poorly compounded, far from neatly labeled and very poorly wrapped. Their prices were in most cases higher than those of the average independent, and the same chain had lower prices in high rent localities with variations on the same prescription as high as 21¢. We displayed the wrapped packages at our general meeting and later opened them to display the individual containers.

After all the effort expended in gathering these statistics, we wanted to be assured of a good attendance at our general meeting since the more present to hear the reports the more general its application and the greater the good to be accomplished. To attract a crowd we invited the local German to speak, gave away over \$600 in attendance prizes and served lunch and refreshments. The meeting attracted the largest crowd we ever had and was possibly our most talked-of venture.

* Presented before the Section on Practical Pharmacy and Dispensing, A. PH. A., Atlanta meeting, 1939.

† 4504 W. Burlcigh St., Milwaukee, Wis.

The survey clearly indicated the need for systematic pricing and we know it resulted in many stores putting into effect a systematic pricing schedule along lines suggested.

Our findings might not provide information applicable to any other city. Each problem is individual, and we feel a schedule suitable to our city

may not be feasible in other areas. However, our procedure furnished so much information and the committee discussion was so general and complete that we were in a position to answer practically every question from the floor.

We hope to repeat our survey at the end of a year and see what progress, if any, was accomplished

The History of Pharmacy in Oregon*

By Adolph Ziefle†

Owing to the lack of authentic records of pharmacy in Oregon for the earlier years, the writing of an accurate and complete history of pharmacy for the last fifty years was a difficult task. Early presidents and secretaries of the Oregon State Pharmaceutical Association apparently did not realize the importance of filing copies of the official drug journal, important addresses and the publication of a proceedings. (Without permanent and accurate records for suggestions and accuracy, some of the most important events are liable to be missed and there will be lack of perfect sequence.)

To write the history for the first nineteen years it was necessary to depend upon incomplete volumes of the *Pacific Drug Review*, the official drug journal for the State of Oregon, old files of newspapers, records in the Oregon Historical Society and conferences with veteran druggists. The writing of this section of the history required twice as much time and effort as the last thirty-one years which was abstracted from the *Pacific Drug Review*. The writing of the history required about three years. The volumes of the *Pacific Drug Review* abstracted page by page makes a pile nine feet high.

The Value of the History

Even though a great deal of time and effort was expended in writing the History of Pharmacy in Oregon, for the following reasons it was a worthwhile activity:

1. No one can fully appreciate a state pharmaceutical association unless one understands the history and traditions of the association. Every druggist in the state will find much of interest in the history.

2. A history provides a means of honoring the founders of the state association and others who gave freely of their time and efforts to improve the status of pharmacy in their state. As one studies the events and the work of the principal characters connected with the evolution of pharmacy in a state, one is impressed with the unselfishness of their labors and the high ideals and motives that prompted

and directed their course. Indeed, we are inspired with respect and reverence for their memories. The founders builded better than they knew. As a result of their labors and sacrifices, every state now has a well-organized state association and a state board of pharmacy with unlimited possibilities for development. Surely, we have no mean heritage, yet one that brings responsibilities to the present generation. It is only by means of a history that these matters can be brought to the attention of druggists.

3. In my contacts with the younger pharmacists I find that they were more deeply impressed with the problems that confronted early pharmacists than the older druggists. The future of pharmacy depends upon the younger generation, anything that will impress them with the ethical phases of pharmacy is worth the effort. An accurate history is an ideal means of influencing the younger pharmacists to take an active interest in association work and the necessity for cooperation.

4. Owing to the fact that the traveling men are having an increasing influence on the programs of state pharmaceutical associations, a historical program with a group of veteran druggists in attendance tends to make the programs more dignified and fulfils the ideals that the founders had in mind when the association was established.

Procedure in Writing a History

For those who contemplate writing a history of pharmacy for their state, I offer the following suggestions:

1. Owing to the fact that staff members of schools and colleges of pharmacy have facilities for stenographic work and are experienced in looking up references they should write the history of pharmacy for their state.

2. The historian should keep a separate file for the history. In order that the history will be kept up to date, should he be unable to do the work, he should inform his associates of his plans and methods.

3. Unless a history is accurate and chronicles the evolution of pharmacy in a state in the proper sequence it is worthless.

4. A special effort should be made to write a complete story of the organization meeting, con-

* Presented before the Section on Historical Pharmacy, A. Ph. A., Atlanta meeting, 1939.

† Dean, School of Pharmacy, Oregon State College, Corvallis.

stitution and by-laws, and those in attendance. 5. A draft of the history for the earlier years should be submitted to a group of veteran druggists for correction. It is worth the time and funds to send a copy of the draft to all druggists of the state. After the introduction has been written it is not difficult to abstract the history from proceedings or the official drug journal.

6. Without exception all state boards of pharmacy have kept an accurate set of minutes beginning with the organization meeting. Owing to the fact that state boards regulate the practice of pharmacy an abstract of the minutes and especially the evolution of the state pharmacy law will be interesting. By all means a complete list of pharmacists who served on the board of pharmacy should be published.

7. The more names mentioned in the history the wider will be its influence. There should be as many cuts as possible and the historian should collect all cuts as soon as they have been published.

8. There should be a section on city and county pharmaceutical organizations, as well as the veteran druggists' association, women's auxiliary and the traveling men's organization.

9. A complete section on pharmaceutical education in the state should be published together with the leading members of instructional staffs since the inception of the institution.

10. There should be a brief summary of the more important events at every convention. Stress in advance especially the Silver Jubilee and Golden

Jubilee conventions and plan for a pre-jubilee convention every ten years. The list of past presidents should be published starring those who have passed away. By all means publish a list of druggists who can qualify as veteran druggists.

11. There should be a complete history of the wholesale and drug manufacturing firms in the state. The commercial phases of pharmacy should not be neglected especially a discussion of the laws designed to stabilize prices.

12. It would be ideal if the complete history could be published in the form of a bulletin. If this is not possible publish a rather complete abstract in the convention program and by all means have a good supply of reprints run before the type is taken out of the forms. At the convention where the history is to be submitted there should be an exhibit of old photographs showing convention groups and antique drug store materials.

13. Pharmacists who served with distinction in federal or state positions should be featured.

14. The historian should keep up a constant campaign for photographs, programs and antique drug store materials for his exhibit. These exhibits are of interest to all who attend the convention and they make an interesting exhibit for a drug show.

15. Although the writer may not be on duty in 1964, when the Diamond Jubilee convention of the Oregon State Pharmaceutical Association will be held, to make it easier for the next historian he will keep the history up to date from year to year.

First Soda Fountain

Elié Magloire Durand was an exile in America. He had been a pharmacist in Napoleon's army and had sought work in New York, Boston and finally Baltimore—but Philadelphia was his goal. At the time it was America's biggest city and chief drug center. A brother of Napoleon—Joseph Bonapart—had settled near by. Other French exiles were there. Here Durand decided to establish himself.

Before he entered Napoleon's army he had served as an apprentice to M. Chevalier of Mayenne, a man of great erudition. Durand had been taught botany, mineralogy and laboratory work, as well as chemistry and pharmacy. He had pursued the experiments of Venel of Montpellier, mixing carbonic acid gas with water and carbonate of soda. It was valuable medicinally and, with a dash of flavoring, made a good beverage. While working for Chevalier, Durand had devised an apparatus for making this soda water.

During his first months in Philadelphia he worked at whatever he found; in chemist's shops, laboratories. While manufacturing mercurial salts his health became impaired and he was forced to go to Baltimore to the home of friends. He recuperated and married, but on the death of his wife he returned to Philadelphia with his infant daughter.

Durand finally decided to support himself and his little girl by starting a drug store. He believed it would be a profitable business if properly equipped—and if beverages as well as drugs and cigars were sold.

For \$500 Durand took a ten-year lease on a building at the southwest corner of Sixth and Chestnut Streets, near Independence Hall. He remodeled it, gave it the modern touch—an entire glass front.

He went to France for equipment, returned to Philadelphia in April 1825. Never had America seen such a drug store. Mahogany cases, porcelain jars, French drugs, chemicals, mirrors, a marble counter and—above the marble counter—an apparatus for making soda water. It was the first such machine ever installed in a drug store.—*This Week Magazine, The Baltimore Sun*, March 24, 1940.

Editor Emeritus E. G. Eberle attended the annual Commencement exercises of the Philadelphia College of Pharmacy and Science on June 5th, at which time his grandson, John Eberle Ryan, received his degree of Bachelor of Science in Pharmacy.

Pharmacy in a Children's Hospital*

By Margaret Anne Pearson†

Pharmacy, walking ever hand in hand with medicine, to-day offers a range of specialization as wide and fully as interesting as her sister profession. Each specialty offers its problems to the pharmacist as well as to the doctor.

Great emphasis is placed to-day on all aspects of the child and his welfare. The family doctor of yesterday is replaced by the pediatrician of to-day. Thus the pharmacist, too, has his part in this widely publicized health program and must also be a specialist. In a Children's Hospital, where the young doctor turns his back on general practice for the exclusive study of that most interesting of subjects, the child, the pharmacist must be ever ready to be his helper. Here the *Materia Medica* and *Pharmacology* he has learned must be scaled down and adapted to the small people of this new world. Tiny throats cannot swallow the massive pills of their elders, and these bitter doses must somehow be made attractive. So, the young pediatrician soon learns that the "pill pounder" can also be a master chef, making those "bitter simples" more attractive to swallow, and eager to learn more of the fascinating art.

Tasty Medication

To-day that story is changed. As the skillful chef carefully blends his spices and savories to delight the taste, so modern pharmaceutical manufacturers tempt the eye, and trick the palate. Yearly a considerable amount of time and money is spent in research on this matter of sight and taste appeal. The result is that the newest medicinal offerings are masterpieces of blending and disguise. The official formularies, too, offer a wide range of flavoring and coloring agents, so that, with a little trial, every medication can be made quite tempting. Dr. Bernard Fantus (1) made an exhaustive study to determine the best vehicles for various remedial agents. By carefully following the suggestions given in those studies and experimenting extemporaneously from time to time, medications can be made that will tempt the most fastidious child.

The sick child in the home, however, may be fretful and prejudiced against even the most attractive medications offered. Here varied additional measures are necessary. The use of honey, because of its viscosity and sweet taste, is most effective. Dr. Fantus (2) also mentioned the use of maple syrup in this connection. Then, too, the many fruit juices, both fresh and canned, now available, are valuable aids to perfect disguise. However, it might be well to consider the indiscriminate use of milk. Milk is an important and extremely valuable article of food and its misuse as a vehicle in

this way might lead to a permanent distaste for it.

A popular device to make doses more pleasant for adult consumption is the use of seltzer, or carbonated water. The tingling effervescence of medicine offered in this guise is well known to all. With children, the substitution of a flavored carbonated beverage, or "soda-pop," should, by its very childhood associated character, make the dose-taking a happy event instead of an onerous duty.

Candy Medication

Candy medication is another rational, though seldom used, method of approach. As early as 1912, Dr. Fantus (3) advocated this method as being the ideal one with which to combat the "spoon-and-pill" bugaboo. To further this ideal, he even went so far as to learn the candy-maker's art. Then he was able to bring forth a considerable number of formulas for the manufacture of sweet tablets. "The Pharmaceutical Recipe Book" contains a number of these formulas. One of the leading pharmaceutical houses prepares a number of these candy medications under the trade-mark name, "Dulcets." The chief objection to this form of administration lies in the danger of accidental poisoning where unused portions remain after treatment. To this the answer is the same as for the keeping of any unused medicines: they should be kept well out of the reach of children! An interesting departure in this same connection is the use of lolly-pop tongue depressors. An ordinary tongue blade, one end thinly coated with a pure fruit hard candy serves a twofold purpose: first, its normal use; then, as a reward for good behavior and cooperation.

Administration of remedial agents to children in the form of powders has long found favor. Here, however, the use of "oil sugars" of the "National Formulary" take preference over plain sucrose or lactose. Since they are mixtures of sugar with volatile oils, their masking action is quite effective. Here the sweetness and ease of administration, even to small children, make up the well-deserved popularity.

All of these attractive aids are, of course, no more than pleasant theorizing in some cases. No manner of disguise can tempt some children, while with others unmasked doses will be gulped with seeming relish. The main thing is that the effort has been made, and, leaving out the unpredictable human element, the children of to-day have a better time of it than their predecessors of a generation or more ago.

The sick child in the hospital, of course, may, in all probability, be too ill to take even the most tempting medication. Here the art of parenteral administration is called into use. The large number of fluids administered subcutaneously and intra-

* Presented before the Sub-Section on Hospital Pharmacy, A. Ph. A., Atlanta meeting, 1939.

† The Children's Hospital, Washington, D. C.

venously are prepared under the pharmacist's ever-watchful eye. Where tiny lives are at stake, purity and accuracy must more than ever be the daily watchword.

Drama pervades the air of a Children's Hospital and as an important "super" in that great play, the pharmacist finds the routine of daily tasks spiced by contact with each new and interesting angle. So, with Young's rule as his Bible and the thought that among these tiny patients may be a future president, physician or even just another pharmacist, pharmacy in a Children's Hospital presents a

kaleidoscopic and engrossing method of aiding the "healing art," and serving humanity.

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U. S. P. and N. F. Publicity in South Carolina*

By W. D. Strother†

In April 1938, the University of South Carolina, through its Extension Division, launched a U. S. P. and N. F. Publicity Program. This project is directed by a committee composed of three members, two of whom are on the University School of Pharmacy faculty, and the third a local druggist, who is a member of the Executive Committee and past-president of the State Pharmaceutical Association.

The work of the committee naturally falls upon the two pharmacy staff members, the local druggist acting in an advisory capacity and as the official representative at association business meetings. So far, there have been no breaks of a political nature, and the course seems open for further progressive activity.

South Carolina stands alone in this program, in that to the writer's knowledge no other state university has ever attempted a project of this type. In making this statement the Extension Committee does not wish to leave the impression that South Carolina has found a panacea for the confusion and distrust in the minds of some eighteen hundred physicians and seven hundred registered pharmacists in our state. This situation has been brought about by the commercial greed of manufacturers, and by the reckless use of brand names for formulas, widely duplicated among different manufacturers and often composed of official drugs.

It is unreasonable to expect any one physician to be familiar with and use intelligently more than a few of these advertised drugs, but that does not excuse him for being unable to write a prescription which will represent the maximum value to the patient, so far as the cost of materials is concerned.

The patient has a right to expect his or her physician to know what he is prescribing, to know if other equivalent drugs are available and, if so, to select from an economical standpoint, quality, of course, being given due consideration.

Statements of this nature have been made by

* Presented before the Conference of State Committees on U. S. P. and N. F. Promotion, Atlanta meeting, 1939.

† 2729 Kirby St., Columbia, S. C.

the writer at hospital staff meetings, local and state medical societies and in medical journal articles. The physicians are frank to admit that the statements are true, and that as a group they are not aggressive enough to do anything about it. The problem is now one of admitted ignorance on the part of physicians so far as knowledge of official drugs is concerned, brought about by energetic salesmen, on one hand, and aided on the other by a large group of non-professional, poorly equipped and inactive pharmacists. The physician criticizes himself freely for having been the prey of persuasive detail representatives. He condemns the waste of time manufacturers entail by their salesmen and literature. Yet he prescribes their products by number and name because he has not learned what else to do.

The physicians and pharmacists in South Carolina have expressed willingness to cooperate with our committee in an attempt to simplify medicine. Physicians, however, have not yet been made to realize that their right by law to prescribe carries with it a responsibility that entails some effort on their part, if they wish to fulfil their obligations to the public.

We, as pharmacists in South Carolina, have diagnosed the doctor's trouble. He has accepted our diagnosis and is now ready to take our medicine, but has definitely specified it must be palatable and stimulating. We ask the question, "Can it be done?" and then leave it unanswered.

What Is Being Done?

After sixteen months our committee has, through bulletins, prescriptions, personal talks at medical society meetings and numerous personal contacts, begun to see trends of encouragement. During the past year it has been the writer's privilege to serve as a part-time pharmacist in one of our local hospitals. This position was accepted partly as a means of attending staff meetings and there giving data on proprietary and official drugs as they might affect the hospital and its pharmacy. For many

months this pharmacy received only passing consideration from the medical staff. All during this time bulletins and prescriptions were being mailed to physicians over the state. Articles appeared in the state and local medical journals on problems of prescription writing and related matters. At the end of one year the writer was asked to appear on the program at a hospital staff meeting to discuss means of reducing the cost of drugs. One of the recommendations made was to have a Pharmacy Committee appointed to study and make recommendations from time to time on formulas that would represent a saving to the hospitals for charity patients, to the patients who are able to pay and to pharmacists. The recommendation was approved and that committee, consisting of the writer and two physicians, has started on our new task. The accepted formulas will be mimeographed on cards and mailed to each physician on the staff, as well as to all physicians and pharmacists in the state on the Extension Committee's mailing list. In this way we hope to correlate the work at the hospital with our Extension Project. The work of each committee should add to the efficiency of the other. It will be our aim to encourage physicians on the staff to write prescriptions for the same formulas for their patients outside of the hospital when such prescriptions are feasible.

It is hoped that other hospitals over the state will appoint similar committees which will in turn work in coöperation with the University Extension Project. Each committee should be composed of at least one energetic professional pharmacist and two or more physicians.

Both pharmacists and physicians have accepted the University Extension plan as the most logical solution of the situation. The writer's connection with the University School of Pharmacy, Chairman of the U. S. P. and N. F. Extension Committee, and member of the Hospital Pharmacy Committee, is making it easier to promote rational prescribing in the hospital. Since the physicians have patients in all the hospitals in our city, the data collected and the formulas adopted in one hospital will be equally useful in others. The committee hopes that pharmacists will, in some manner, detail their physicians on these formulas and that physicians will in turn write prescriptions when possible for the approved drugs, thus accomplishing the objectives of the Extension Committee.

More than Publicity Required

Our committee does not believe our work should end with publicity. Numerous council-accepted preparations will, of course, be official in time. However, we do not believe it is good business, or necessary, for any one institution or drug store to stock all the different brands of even a council-accepted drug. Some plan must be worked out to solve this and other problems.

The university can easily justify itself in financing the project because it offers a direct service to the taxpayer in lowering the cost of medicine. However, at the last convention the state association approved a recommendation by the president that each registered pharmacist in the state contribute one dollar to the Extension Division to help finance the program.

The Extension Project can succeed only to the extent pharmacists are willing to coöperate with our committee. We have a group of pharmacists who do not desire professional work. Others do not have the equipment or the energy to pull themselves out of a rut. These types of stores will retard the aggressive and professional-minded pharmacists in their objectives.

Equipment of the Pharmacy

In the annual report to the state association, the writer pointed out that a very large per cent of the drug stores in the state not only did not possess a late edition of the U. S. P. and N. F., but did not have a modern reference book of any description. The question was asked, "How can we as pharmacists serve the medical profession adequately with such antiquated tools?" A motion was made and carried, without opposition, to take the necessary step to introduce a bill at the next session of the State Legislature to make it compulsory for every drug store to have on hand, at all times, a copy of the latest edition of these books. We represent an old and honorable profession, but that profession is too often not practiced in a manner that does honor to pharmacy.

In conclusion, the writer would like to confirm the opinion of others that teaching professional prescription writing to physicians is to-day, as it always has been, an educational problem. Therefore, it seems logical that educational institutions should lend support to a movement that upholds the ultimate objectives of scientific medicine and the ideals of professional pharmacy.

University of Michigan, College of Pharmacy, together with the Michigan Branch, A. P. H. A., sponsored a Pharmaceutical Conference on May 21st in Ann Arbor. Those on the program were: C. C. Glover, Professor of Pharmacognosy, University of Michigan, Address of Welcome; Dr. B. V. Christensen, Dean, College of Pharmacy, Ohio State University, "Recruiting for the Profes-

sion of Pharmacy;" Arthur Secord, Extension Service and Department of Speech, University of Michigan, "Developing an Effective Personality;" Dr. Arthur C. Curtis, Associate Professor of Medicine, University of Michigan, "Sulfapyridine and Anti-sera in the Treatment of Labor Pneumonia."

The Pricing of Hospital Medications*

By Hazel E. Landeen†

Hospital pharmacy has almost without exception remained strictly professional in its aims and obligations. The future will see more and more professional pharmacy practiced in the nation's hospitals. The dignity of the calling, its opportunities and responsibilities will increase in direct ratio with its growth. Its code of ethics will receive corresponding emphasis. With increasing demands for better hospitalization at lower costs the matter of economy is one which no hospital administrator is going to overlook. Hospital pharmacists must be prepared to consider practical economics as well as ethics in the discharge of their duties.

On the other hand, hospital pharmacy has much to learn from the professional store in respect to conducting the pharmacy in a more business-like manner. The ultimate benefits resulting from such a coöperation will be a strengthening of public favor for the services of the professional type of pharmacy not only outside of but inside the hospital and within the hospital itself the focusing of more attention on the pharmacy by both the administrative and business offices.

Pricing Schedules Necessary

To the writer's knowledge no complete survey has been made regarding the pricing of medications in the nation's hospitals. The need for some system in medication pricing was emphasized by replies received from a questionnaire sent out to a few representative hospitals in the four geographical sections of the country. The answers received (with one exception) indicated that the hospital pharmacist is not encouraged to either outline or follow any pricing schedule such as is required by outside prescription stores. Characteristically enough there seemed to be a resentment on the part of the pharmacist toward the administration for its apathy in this respect. In most instances the pharmacist seemed timid about making a legitimate charge to the patient for the professional services rendered by the pharmacy. One reason for this timidity may be the fact that too many hospital administrators deem it unnecessary to discuss the budgetary needs of the department with the pharmacist or to render the pharmacist a monthly report of the expense and income of the pharmacy. It is the author's contention that a frank discussion of such matters would increase the pharmacist's interest in his or her department and enable him to make suggestions concerning a prescription-pricing schedule which would be a business asset to the entire hospital. Other reasons for the pharmacist's timidity in mak-

ing fair charges may be an underestimation of his or her professional standing and responsibility to the patient. With the growing recognition of the importance of hospital pharmacy such restrictions in judgment will gradually disappear.

In the case of every hospital questioned a separate charge was made to patients for medications used. All were of the opinion that a "blanket" charge for medications (even with exceptions of special charges for serums, vaccines, antitoxins and the like) created much dissatisfaction. Each hospital had a list of drugs which were included in room and ward-unit service. These lists were not given in detail but undoubtedly a great deal can be done to simplify the number and kind of drugs issued for room and ward service.

What Patients Should Pay

And what constitutes the basis for determining the price patients pay for their medications? If the replies from those hospitals questioned together with those with which the writer is personally acquainted are any indication of system used throughout the country, then the answer is: "the hospital pricing of medications is literally and figuratively speaking baseless." In only one instance did the hospital questioned follow an established pricing schedule—that of the N. A. R. D. This same institution also employed that state's Fair Trade Pricing instructions and added, "it protects the professional retail pharmacist and discourages the prescribing of costly proprietaries"—a point very well taken! Most of the pharmacists questioned inclined to the belief that it was not possible to follow the N. A. R. D. pricing schedule. The implication seemed to be that such prices would be too high. Why should not the professional services of the pharmacist within the hospital be worth as much as those of the pharmacist in professional retail practice? Hospital pharmacists must meet the same rigid requirements of education, training and licensing. The hospital should expect to make the same professional charges for these rigid requirements and should also take into consideration the many expenses to which the hospital is subjected because of its pharmacy department. (Several of these are borne by the pharmacist directly but are, perhaps, considered in the salary paid the pharmacist and, therefore, indirectly assumed by the hospital.) These expenses include: registration fee, narcotic license fee, alcohol permit fee, cost of required reports, necessary official books, certain special equipment and breakage thereof, prescription blanks, liability insurance, drug and journal publications, membership in professional associations, etc.

The N. A. R. D. prescription-pricing schedule

* Presented before the Sub-Section on Hospital Pharmacy, A. P. A. Atlanta meeting, 1939.

† Midway Hospital, St. Paul, Minn.

was the one referred to in the questionnaire because it was the one with which the writer was most familiar. There are others, however, which may answer the purpose and uses of the hospital pharmacy more adequately. Suggestions from a paper entitled, "Fair Pricing of Prescriptions" by Edward S. Rose, given before the Section on Practical Pharmacy and Dispensing at the A. Ph. A. Convention in Minneapolis last August together with an outline of pricing instructions graciously submitted to the writer by the owner of one of Minnesota's most outstanding prescription pharmacies form the basis for a suggested system of pricing hospital medications. It is the writer's hope that it will provoke thought and discussion. The Fair Pricing of Prescriptions is as follows: According to the general scheme charges must take into consideration three factors, namely, (1) Material, (2) Professional service, (3) Overhead.

For Materials: Double the cost of material and container with a minimum of—\$.10.

For Professional Service: Charge at the rate of \$2.00 an hour with a minimum charge of—\$.15. (Mr. Rose's professional service charge is \$3.00 an hour to cover conditions in any part of the United States.)

For Overhead: A charge of twelve per cent of final price of prescriptions; minimum charge of—\$.10. Minimum price of any prescription is \$.35; this amount was the average suggested in a survey made by Mr. Rose.

Suggested Outline of Prices

For ready reference in compounding prescriptions the hospital pharmacist should prepare a schedule for capsules, ointments, pills, powders, liquids, external and internal, etc. The outline as suggested by the Minnesota store is as follows:

Capsules (Prepared by pharmacist)

6.....	\$.50
12.....	.75
15.....	.85
18.....	.90
20.....	.95
24.....	1.00
30.....	1.10
36.....	1.25
50.....	1.50
100.....	2.25

Deduct 10% discount when dose is 2 or more at one time 3 × a day or R's of 24 or more.

Add double cost of expensive drug or chemical.

R's taking more than customary amount of time, double cost of ingredients and container plus dispensing fee.

Ear Drops (ordinary)

1/4 oz.....	\$.35
1/2 oz.....	.40
1 oz.....	.50
2 oz.....	.75

Gargles (ordinary)

1 oz.....	\$.35
2 oz.....	.50
3 oz.....	.60

4 oz.....	.75
6 oz.....	.90
8 oz.....	1.00

Calamine Liniment

4 oz.....	\$.65
8 oz.....	.90
16 oz.....	1.50

Eye and Nose Drops

1/4 oz.....	\$.35
1/2 oz.....	.50
1 oz.....	.75
2 oz.....	1.00

Double cost of ingredient plus minimum fee where cost plus container exceeds 25 cents per ounce

Liquids (external)

Calamine Lotion

4 oz.....	\$.50
8 oz.....	.80
16 oz.....	1.25

All other external lotions and liniments same a calamine lotion.

Exceptions: All costing more than 75 cents a pint, double cost of ingredient plus dispensing time

Mouth Washes

Use schedule of lotions and external liquids.

Exceptions: Where cost is beyond average charge 2 × cost of ingredients and container plus fee.

Liquids (internal)

Regular:

1 oz.....	\$.40
2 oz.....	.60
3 oz.....	.75
4 oz.....	.90
6 oz.....	1.20
8 oz.....	1.50
16 oz.....	2.50

Add to selling price of R cost of expensive drug or salt at double cost of same unless vehicle is less than 5 cents per ounce.

Discount 10% in doses of 2 drams T.I.D.

Discount 20% if dose is 4 drams T.I.D.

Exceptions:

Mistura Glycyrrhiza Co.

4 oz.....	\$.75
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Liquid Drops (internal)

Drop doses:

oz. ss.....	\$.40
oz. I.....	.60
oz. II.....	.90

Exceptions:

Tr. Stramonium

Sol. Pot. Iodide

Sol. Sod. Iodide

oz. ss.....	\$.50
oz. I.....	.75
oz. II.....	1.00
oz. III.....	1.25

More expensive, double cost plus minimum compounding fee.

HCl Dilute

oz. ss.....	\$.40
oz. I.....	.50
oz. II.....	.60
oz. IV in dram doses.....	.75

*Ointments**Regular:*

1/2 oz.....	\$.50
1 oz.....	.75
2 oz.....	1.00
3 oz.....	1.25
4 oz.....	1.50
8 oz.....	2.25
16 oz.....	3.50

Dispensed in jars.

When dispensed in tubes, add 25 cents to each price.

Ophthalmic Ointment (ready made)

1/8 oz.....	\$.40
1/4 oz.....	.50

Ointment Specialties

Treat as a specialty. Expensive, double cost of ingredients, plus containers and dispensing charge.

Ampuls

High prices special, add 50% to cost plus 10% broken lots.

Regular priced, double cost plus 10% in broken lots.

Biologicals

List price.

Pills (Prepared by pharmacist)

Same schedule as for capsules

Pills (ready made)

Costing per hundred:

	100	100	100
	\$.25	\$.50	\$.75
12	\$.35	.40	.45
25	.45	.50	.60
50	.60	.75	.95
100	.75	1.25	1.50

Discount 10% if dose 2 or more T.I.D.

Powders (Bulk)

Double cost of ingredients, add \$2.00 per hour dispensing fee plus 10 cents on each R_x overhead.

Powders (Ulcer)

No. 1.....	4 oz.....	\$.60
	8 oz.....	.85
	16 oz.....	1.25
No. 2.....	4 oz.....	.65
	8 oz.....	.85
	16 oz.....	1.25

Powders (Prepared by pharmacist)

Same schedule as for capsules.

Suppositories (ordinary)

6.....	\$.75
12.....	1.00

15.....	1.15
18.....	1.25
24.....	1.50
36.....	1.75
50.....	2.00

Add double cost of expensive drug.

Specialties

Original packages: Add 50% to cost plus minimum charge for dispensing.

One-half or more of original package—double cost.

Less than one-half of original package—double cost plus minimum dispensing charge.

In cases where established prices are lower than above schedule, charge as per established price.

Proprietarys

Treat same as specialties.

In the case of liver and vitamin products it is suggested that Fair Trade Prices be used plus a minimum professional service charge.

Charges should be based on the nearest sized package purchased of the material in question or size of package bought by average pharmacy.

In the hospital a goodly number of official and non-official preparations are made by the pharmacist. In such instances one of two methods of pricing should be used: (1) Use cost of a standard pharmaceutical house or (2) double the cost of materials and add labor at \$1.50 per hour.

One of the problems with which all hospital pharmacists must grapple is that of credit for drugs ordered but not used or only partly used. Hospital pharmacists questioned on this subject stated that credit was given for drugs returned provided they could be returned to stock. In no case was credit given for prescriptions returned. It appears to the writer that while credit should be given for drugs returned in good condition, a certain per cent should be charged to cover the original professional service charge and also bookkeeping costs. If some such system was inaugurated and the attention of physicians and nurses called to it, more care would be exercised in amount and kind of medications ordered for patients.

Hospital pharmacy is slowly but surely gaining recognition. It can improve its status by combining its professional ethics with sound business management. Instead of seeking it will be sought. And, finally, it has within its grasp the opportunity to identify itself with the wider practice of pharmacy.

New Jersey State Pharmaceutical Association met on June 25th to 27th, at Asbury Park. The principal addresses were made by: Dr. R. L. Swain, Editor, *Drug Topics*, "Public Opinion as an Aid to Professional Pharmacy;" Oscar Singer, Presidential Address; Dr. C. I. Ulmer, "A Message from the Medical Profession;" Dr. F. Herbert Owens, Jr., "Veterinary Medicine and the Pharmacist;" Dr. Herbert M. Cobe, Temple

University, Philadelphia, Pa., "Allergy and the Pharmacist;" Dr. Morris Fishbein, Editor, *Journal American Medical Association*; I. H. Bander, McKesson & Robbins, "The Economic Situation Facing the Retail Pharmacist Today." An interesting feature of the convention was "Seventy Years of Progress" as recalled by Past-Presidents, led by C. J. McCloskey and Charles Schamach.

Why a Pharmaceutical Education?*

By Howard C. Newton†

By "eliminating those who have no business to be there," one of the great problems in our colleges could be solved, according to President Hutchins of the University of Chicago.

"Carefully restricted matriculation has loomed large in *our* thinking," said Chairman E. L. Guthrie of Virginia on this subject in addressing the most recent District No. 2 Boards and Colleges Meeting, seeming to indicate that he was inclined to favor Dr. Hutchins' views.

Editor Robert L. Swain echoes and amplifies these expressions when he writes, "Mr. Guthrie knows we can't make a silk purse out of a sow's ear and thinks it would be foolish to try. . . a little sensible selection might do pharmacy a heap of good."

All of which is not a new thought. And there seems to be little disagreement as to the logic of the thinking. More and better students is the desire of most of our colleges of pharmacy—all of them proclaiming their eagerness for *better* students and, perhaps secretly, most of them would welcome more than their present numbers.

One might ask, appropriately, why something isn't done about it if this elimination of the unfit is so desirable. And the answer is that something is being done about it, especially about the methods by which the undesirables might be sifted out. Studies are being pursued and tests are being devised, all seeking to make it possible to let into the profession those who should be in it and keep out those who should be elsewhere. There is the danger, of course, which is always present when one tries to exclude by arbitrary rules. He may find that his rules would only admit "you and me, with some doubts about you."

It is not my purpose now, however, to discuss methods of exclusion as I know that even if the methods were perfect, the majority of colleges of pharmacy would not use them under present conditions because these colleges doubt if they could function economically with smaller enrollments. This presents a real problem of the profession, then—how to attract the best material to it so that a high standard personnel may be maintained and, also, so that the aptitude and placement tests which are being devised may be put into active use when they are perfected. It is on a phase of this problem of how to attract the best of prospective students to our colleges of pharmacy that I wish to speak.

To arouse school spirit we all know we must give the students something to be proud of. What is so helpless as a cheerleader at a night football game urg-

ing a miscellaneous group of spectators to cheer, when this group is far from proud of the work of the players in the game, so far! It is equally futile to expect the best prospective students to choose pharmacy as their field of endeavor unless we can show them why a pharmaceutical education really is a good proposition for them.

What the Students Say

To find out the attractive features of pharmacy as a vocation I suggest that we listen attentively to the prospective students themselves. They see pharmacy from a point of view which is advantageous. In talking with them you will realize that their thoughts and decisions on the subject are conditioned by many factors—the desires of parents, the professional advice of vocational guidance directors, the experiences of acquaintances, their own natural prejudices, their personal contacts with the vocation and so on, including, of course, their natural talents.

Fresh from interviews with scores of prospective students, a larger number perhaps than most members of our profession are privileged to meet, I thought it would be worth while to express some of the thoughts which resulted from these interviews. They may aid in solving the problem which we have stated.

These three answers by prospective students given time after time to the question, "How did you happen to choose pharmacy?" seem most significant and we shall consider them in an epitomized form.

A Most Frequent Answer

"I have always wanted to mix medicines; the combination of science and medicine appeals to me. The possibility of making something new which might cure a disease is intriguing. It must be a real satisfaction to fill prescriptions."

Here we have an attraction indicated which is almost universal, one which is being employed continually in the advertising field. Are we making the most of it? During the past year our institution found that the most valuable aid in stimulating a strong interest in pharmacy on the part of good prospective students was our "Open House" in which some 350 pharmacy students and faculty members were "mixing medicines" and explaining their work to the thousands who came to see them. It is difficult to realize the drawing power of such demonstrations until one has witnessed it. Science and medicine have a remarkable appeal.

Another Very Frequent Answer

"The work is clean and there seems to be no difficulty getting a job. I know a 'tech. grad.' who had considerable difficulty in getting even a low-

* Presented before the Section on Education and Legislation, A. Ph. A., Atlanta meeting, 1939.

† Dean, Massachusetts College of Pharmacy, Boston, Mass.

wage position but all of the 'pharmacy grads.' whom I know were placed right away."

In this we have another attraction which is tremendous. How discouraging for a college graduate to find no one seems to need his services after four or more years of general preparation, but how stimulating for a graduate to find that he has a choice of several positions just as soon as he becomes available for them. The latter was true this past year in pharmacy. An education and a training which have obvious objectives, which prepare for a service which is in demand—which lead to employment; that is an attractive picture!

A Third Frequent Answer

"I find I can do some outside work while attending a college of pharmacy and that makes it possible for me to go to college. I should think the work in a drug store would help me understand pharmacy better also."

This supplementary work proposition has many angles and others have presented their views on them so I shall not express my opinion at this time but will offer the preliminary report on a survey made in our institution during the past year. This shows that the prospective students had some basis for their conclusions. The report follows:

Student Employment

A preliminary study of the recent survey made by the Placement Bureau of the College relative to the earnings of the students yields some interesting figures.

(a) It was found that 82 per cent of the students earned a portion or all of their college expenses.

(b) The total earned by all of these students for the calendar year (college session plus summer vacations, months of March, April and May estimated) is \$86,565 or some \$18,000 more than the combined tuition and other fees of all the students in the College.

(c) The total earned by the 172 students now employed is \$42,069 for the college session.

(d) The total earned by 24 students who have been employed during the session but are not now employed is \$2081.

(e) The summer (1938) earnings of 241 students are \$42,415.

These figures do not include scholarships received or the earnings of graduate students.

During the college session, the average earnings of the students employed are as follows: Freshmen, \$190.00; Sophomores, \$240.00; Juniors, \$251.00; Seniors, \$323.00. This shows the increased earn-

ing power of the student as he progresses toward his senior year.

Nature of the Employment Varies Greatly

From newsboy to professional photographer or from busboy to club supervisor—but a significant figure is the percentage of these who are employed in some phase of pharmacy, which follows: Freshmen, 63% in pharmaceutical employment; Sophomores, 64% in pharmaceutical employment; Juniors, 86% in pharmaceutical employment; Seniors, 89% in pharmaceutical employment. This seems to indicate rather clearly that a college of pharmacy is successful in "aiming as well as loading" those students who have sought education and training within its walls.

Many other attractive features of pharmacy as a vocation have been brought out by those who are considering it, but those which have been given are sufficient for our purpose. When scores of prospective students show us how naturally attractive pharmaceutical work is and how economically sound a pharmaceutical education and training seem to be, certainly the profession should be able to maintain the standard of its personnel at a reasonably high level.

Purpose of the Training

To those within the profession who find it difficult to accept any viewpoint other than that of the colleges of liberal arts, I quote from an address of President Bancroft Beatley of Simmons College.

"In all the controversy that has raged over introducing vocational courses into an academic program, one thing stands out clearly in my mind. The opponents of the idea seem to base their arguments on the premise that liberal education is one thing and vocational education something quite different and perhaps unworthy. . . . One commonly hears the expression that the college is designed not to teach young people to earn a living, but to live—as if it were possible to separate the two. For most of us, work is a dominant life interest, and a type of education which studiously ignores this fact appears to be something less than liberal."

In conclusion, the purpose of this paper is to encourage those within the profession through this brief recital of some of the opinions of prospective students regarding it—not opinions of pharmacy as it was years ago but as it is now. Let's share the optimism of these young people and make our future plans accordingly. If we do, I predict we shall solve the problem of how to attract the best talent to the profession.

The dedication of the new Godding laboratory, in the college on Longwood Avenue, was an outstanding feature of the Commencement Week exercises of the Massachusetts College of Pharmacy. The laboratory was dedicated to the memory of the late John Granville Godding of

Newton, in recognition of his distinguished service as treasurer of the college from 1890 to 1929. Dean H. C. Newton made the opening address and Ex-Mayor Edwin O. Childs, of Newton, was the principal speaker.

Local and Student Branches

ALABAMA TECHNIC INSTITUTE STUDENT BRANCH.

—The first meeting for the month of March was held Monday at 7:15 P.M., in Ross Chemistry Building. At this time Dr. L. S. Blake presented the Rho Chi medal for the freshman pharmacy student with the highest average to William Harold Michelson, Decatur. Rho Chi had previously awarded medals to Frank Rutledge, Ben Eich and Beth Murphy.

During the business meeting the proposed trip of the juniors and seniors to Eli Lilly in Indianapolis in March was discussed. Carl Green was appointed reporter to the *Southeastern Druggist*. The following committees were appointed: Membership—Harold Smith, Horace Dykes, Marion McMullen; Program—William Malone, Beth Murphy, Carl Green; Science of Practice of Pharmacy—Harold Michelson, Dawson Waits, A. H. Lurie; Window for Pharmacy Display—A. H. Lurie, Ted Ham, A. F. Smith.

A special meeting was called for the following Monday night to complete plans for the Eli Lilly trip and to discuss plans for uniting with the Chemical Society in the Chemical Ball.

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The second meeting of the month of March was held on the 18th in Ross Chemical Building. At this time the trip to Eli Lilly was discussed and final arrangements made. Plans for combining with the Chemical Society in the Chemical Ball were discussed and it was decided to have the annual pharmacy banquet the same evening before the dance. The motion was carried that each member of the association pay \$1.00 for the dance, and that the entire student body of the Pharmacy Department pay \$1.00 each for the banquet.

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The first meeting for the month of April was mainly for the purpose of appointing committees for the collection of the money for the dance and banquet to be held April 20th. The following men were appointed to do the collecting: Messrs.: Croxton, Godwin, Malone, Smith, H. W., Stacey, Dykes, Dobbins and McDavid. Mr. Pittmann was appointed in charge of the menu, and Mr. Lurie in charge of getting samples.

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The Student Branch joined with the Chemical Society in its Annual Ball, Saturday, April 20th. Features of the ball were the leadout for the pharmacy students, Phi Lambda Upsilon leadout, Chemistry department leadout and two no-breaks. Dr. and Mrs. Lynn S. Blake represented the pharmacy faculty.

BETH MURPHY, *Secretary*

CHICAGO.—The Branch held its 265th monthly meeting on Tuesday, April 16th, with an attendance of ninety or more.

President Templeton opened the meeting with a call for the following resolution offered by Mr. Lewis E. Martin on the death of Dr. Bernard Fantus:

WHEREAS, The Creator has deemed it wise and just to remove from our midst on April 14, 1940 an ardent member of our Association, the chairman of our Medical Relations Committee, Dr. Bernard Fantus; and

WHEREAS, Dr. Fantus was a physician and pharmacist of national reputation and a leader in the attainment of high ideals for American medicine and pharmacy and a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1908; and

WHEREAS, That in the death of Dr. Bernard Fantus the pharmacists of America and the members of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION in particular have lost a true friend whose teachings and coöperative spirit will long remain with us; therefore be it

Resolved, That we, the members of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION, express our admiration of the character of the late Dr. Bernard Fantus and our deep sorrow in his loss, and that we extend our sympathy and condolences to his widow and daughter; and be it further

Resolved, That a copy of these resolutions be spread upon the minutes of the Chicago Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION and that a copy be sent to Mrs. Fantus.

It was moved and seconded that the resolution be adopted.

A financial report as of April 16th was then presented by the secretary. Following this, an induction of the officers elected at the January meeting was made.

The president then introduced the speaker of the evening, Dr. D. W. McCorquodale of the Abbott Laboratories, who spoke on "Vitamin K—Natural and Synthetic, and Other Vitamin K-like Substances." He gave a complete and immensely interesting discussion of the subject, beginning with the discovery of the vitamin as incidental to the study of cholesterol metabolism of the chicken.

Chicks, on a cholesterol-free diet, were found to be prone to hemorrhage. Various materials were then added to the diet without improvement until it was found that addition of 5.0 Gm. of cabbage per day corrected the deficiency. At that time it was believed to be one of vitamin C. Dam, in 1934, suggested that the deficiency was of a fat-soluble factor which was later termed vitamin K and which was concerned with blood coagulation.

The speaker then told of his experiences in working with the various phases of the problem and of the source, chemistry, physiology, pharmacology, therapeutics and clinical use of the vitamin, bringing out the two latter phases in regard to its use and value in obstructive jaundice and under conditions of low prothrombin content of the blood.

EDWARD E. VICHER, *Secretary*

FERRIS INSTITUTE.—The monthly meeting was held March 19th, with Henning Engmark presiding.

The speaker of the evening was Dr. Scholler, local optometrist, who gave a most interesting talk on ailments and defects of the eye, and the methods employed for their prevention and treatment. He sketched clearly the different fields of the optician, the optometrist and the ophthalmologist or oculist, with a comparative review of the schooling and training required in these fields.

Various instruments, such as the ophthalmoscope and retroscope, were shown, and the principle of their use explained to the group; and in this connection the speaker emphasized the comparative value of objective and subjective examination of the eye, as well as the advantages and disadvantages of the use of drugs, such as mydriatics, myotics, cycloplegics, etc. Special mention was made of the fact that many times eye trouble is due not to defective eyes but to general systemic disturbances, such as in the diabetic individual.

Following this excellent talk a very informative forum was held and it was not until the late hours of the night that the meeting was finally dismissed.

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The monthly meeting was held April 17th, with William Sutton presiding. Branch discussed sending one or two students, as representatives to the A. Ph. A. Convention but no definite plans were decided upon.

The speaker of the evening was Mr. Gunnar von Tell, a local pharmacist, who received his training in Sweden. The speaker compared pharmacy in Sweden to that of our homeland. Drug stores in Sweden, called "apotek," are entirely ethical, being controlled and regulated by a medical commission at Stockholm. Each store has its own laboratories. Stores are named after animals, such as swan, eagle, bear, etc. In order to become a pharmacist one must spend two years as an apprentice followed by six months of study, which allows one to write an examination for pharmacist candidate, who is allowed to fill prescriptions, plus one more year of practical training, after which two years of advanced school are mastered before writing the final examination. A pharmacist obtains a position by appointment, after acceptance. One must serve twenty years' merit before he may own his own store. Pharmacists retire at the age of sixty-seven, on pension. Mr. von Tell showed copies of pre-

scriptions and labels used in Sweden while telling of the method of operating stores.

MORRIS E. FOCKLER, *Secretary*

GEORGE WASHINGTON UNIVERSITY SCHOOL OF PHARMACY STUDENT BRANCH.—The meeting was called to order at 3:10 P.M. by President Cottrill. He immediately called on Dr. Wilson, who introduced the guest speaker, Dr. E. F. Kelly, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION whose subject was "The Purpose of the Student Branches of the A. Ph. A." He expressed his personal good wishes and the good wishes of the Committee on Student Branches for the success of our organization.

Dr. Kelly then spoke of the basic purposes of the Student Branches, stating that the primary purpose is to bring to the students phases of pharmaceutical work not touched on by the school. He then cited the objects for which each member of the Branch should strive:

- (1) To look into the history of his organization and his profession so that he might have a clearer conception of their growth and their problems;
- (2) to consider the future of pharmacists as consultants to physicians;
- (3) to prepare and be ready at all times to exchange ideas with members of his own and other professions.

The charter of the Branch was presented by Dr. Kelly to President Cottrill who accepted it on behalf of the Branch.

The president then asked the secretary to notify all full or part-time members of the faculty who are members of the A. Ph. A. to the effect that they are honorary members of the Student Branch.

Members of the committees were introduced to the group.

The Vice-President Samuel Bialek, as chairman of the Program Committee, announced that the next regular meeting would be May 23rd, in the form of a luncheon, 12:30, to be held in conjunction with the District of Columbia Pharmaceutical Association at the Wardman Park Hotel.

The Secretary, Owen Chilcoat, reported that a write-up of this meeting had been submitted to the university newspaper, the *Hatchet*, and that a report of the meeting would be sent to the secretary of the A. Ph. A.

Mr. Haft made a motion that the Branch appoint two delegates to an Inter-Professional Council called the Service Party. Withdrawn.

Motion was then made and seconded that the president appoint a committee to investigate the question at hand, and to announce recommendations at a later meeting.

OWEN CHILCOAT, *Secretary*

MICHIGAN.—The March meeting was held Tuesday evening, March 26th, at the Wayne County Medical Society Building. The usual excellent steak dinner preceded the meeting. About sixty members and friends were present when the meeting

was called to order at 8:15 P.M. by President H. A. K. Whitney. The minutes of the previous meeting were read and approved.

Professor C. H. Stocking, University of Michigan, issued the formal invitation in behalf of the College of Pharmacy, to hold the May meeting in Ann Arbor in conjunction with the annual Pharmaceutical Conference, which will be held Tuesday, May 21st. He announced the program for the day which should prove unusually interesting. (See p. 168, April JOURNAL.)

Dean R. T. Lakey announced that on April 4th Dr. Kremers of the University of Wisconsin College of Pharmacy would celebrate his 74th birthday and a testimonial would be sponsored by the university in his honor. Dean Lakey moved that the secretary send to Dr. Kremers the best wishes of the Michigan Branch on this glorious occasion. The motion carried.

President Whitney introduced the speaker of the evening, Dr. A. J. Leahman, a graduate in pharmacy as well as medicine, of Washington State University, who spoke on "Features of Alcohol." He said much has been written about the effect of alcohol. More than three hundred articles a year appear in literature on this subject. Dr. Leahman astounded the group by telling them what people are drinking. He divided the consumer into seven distinct groups:

1. The individual who can afford the best that money can buy.

2. The medium class that can afford the so-called 4-year liquor at \$1.75 a quart.

3. The poorer class that gets his alcohol by wringing it out of canned heat.

4. The group that drink a concoction of $\frac{1}{3}$ ether, $\frac{1}{3}$ alcohol and $\frac{1}{3}$ glycerin.

5. In this group we find Tiger Sweet, Mountain Dew and Red Eye.

6. Quart milk bottles containing a mixture of milk and gasoline. In this group we find the bum who can't afford liquor and after drinking the above potion, goes to sleep for three days. This allows for three days' rest and wear and tear upon his clothing, particularly shoe leather, and then, too, takes three days off his life.

7. This is the lowest form of all, the "Gas Sniffer" found in abundance in the oil fields of Oklahoma.

Under the title of "Who Likes Alcohol?" we found that animals and birds crave the effects of alcohol in about the same degree as man, and show about the same behaviorisms as man under the same conditions. Dr. Leahman illustrated the balance of his talk with slides demonstrating the effects of alcohol upon humans as well as animals, and again proved that the effects are similar.

A spirited discussion followed, led by Mr. Mellin, Mr. McCabe, Professor Glover, Dean Lakey and Mr. Seltzer. The discussion brought out the opinion of Dr. Leahman that the type of drink that one consumes, whether it be a fancy liquor, cordial,

cocktail, high-ball or canned heat, always has the same alcoholic effect pharmacologically.

President Whitney thanked the speaker for his most interesting talk which proved illuminating and educational as well as humorous.

BERNARD A. BIALK, *Secretary*

NEW YORK.—The April meeting was held at Columbia University College of Pharmacy, on Monday, April 8th at 8:30 P.M. Seventy-five members and guests attended. The minutes of the March meeting were read and approved.

Dr. Hugo Schaefer spoke on the convencion of the New York Pharmaceutical Council and urged all present to attend. The new City Sanitary Code and various trade matters will be discussed.

Dr. Schaefer reported for the Remington Honor Medal Committee and announced that the recipient of the medal for 1940 is Dr. Robert L. Swain, editor of *Drug Topics*. He suggested that a dinner be held in honor of the medalist for the purpose of presenting the medal. Dr. Schaefer was directed to contact Dr. Swain and ascertain if this proposal met with his approval. The Secretary was directed to send a letter of congratulation to Dr. Swain.

A letter from Dr. Kelly was read, asking the cooperation of the Branch in arranging an exhibit in the Scientific Section of the Exhibition to be held in connection with the American Medical Association's convention in June. The Branch voted to undertake the matter and after some discussion referred same to Dr. James Kidder, chairman of the Professional Relations Committee.

In view of the fact that the Convention of the AMERICAN PHARMACEUTICAL ASSOCIATION and of the United States Pharmacopœia conflict with our regular meeting date, and that many of our members will be away attending these conventions, it was regularly moved and carried to hold our next meeting on May 20th.

Mr. Gustave Bardfeld then introduced the speaker, Dr. Herman Goodman. His topic was, "A Dermatologist Looks at Prescriptions for the Skin."

The discussion which followed was led by Drs. Stack, Wimmer and Lascoff. At the conclusion a rising vote of thanks was extended.

HORACE T. F. GIVENS, *Secretary*

NORTH PACIFIC.—Upon order from the Board of Directors a meeting was scheduled for January 26th. The purpose of the meeting was to discuss the problems incidental to the fact that the Council refused accreditation to North Pacific College of Pharmacy. Professor Fred Grill presided.

Dean A. O. Mickelsen made an introductory talk announcing the fact that North Pacific College of Pharmacy had been refused accreditation and was at a loss to understand why such action was taken and further announced the fact that no notification

had been received of their action until January 6th, during the mid-term of the school.

Fred Geue then reported on a conference with Dr. E. F. Kelly of Washington, D. C., and Dr. C. H. Miller then outlined the policies of the School and clearly brought out the fact that it was evident that all the facts were not known when the committee was called upon to rate the standing of the School. At the conclusion of his talk Mr. Tom Allen moved for the adoption of a strong resolution which was to be sent to all members of the committee voicing objection from the North Pacific Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION and demanding an explanation why such action was taken. This motion was seconded by Mr. Nau and unanimously carried. A copy of the resolution was attached to the minutes.

A meeting was held in the auditorium of the Selling Building on Wednesday evening, April 3rd. Dr. H. C. Miller, president of North Pacific College, gave a detailed report of his conference in Washington, D. C., with the Committee on Accreditation. At the conclusion of his address the regular business session was held.

This was the annual meeting for election of officers. Mr. Ed Stipe was nominated for *President*; Mr. Walter Rhodes, *First Vice-President*; Mr. Harvey Donnell, *Second Vice-President*; and Mr. Fred Geue, *Secretary and Treasurer*.

As there were no further nominations it was moved by Mr. Nau, seconded by Dean Mickelsen, that the above-named gentlemen be unanimously elected.

President Ed Stipe then took the chair and the appointment of committees followed.

Dean A. O. Mickelsen was appointed the official delegate from the North Pacific Branch of the A. P. H. A. Mr. Frank Nau was delegated as a committee of one to determine if it were feasible and practical to have some of the famous chinook salmon of the Columbia River served at the convention.

F. A. GEUE, *Secretary*

PHILADELPHIA.—The April meeting was called to order by Chairman Leberknight at 8:30 P.M. on Tuesday, April 9th, at the Philadelphia College of Pharmacy and Science. The minutes of the March meeting were read and approved.

Mr. Drain nominated the following to associate membership: Elizabeth Adams, Susan Cawley, William Levin, Mildred Garrell, Adelaide Bekes, Harriet Finney, Vera Cianfrogna, Marie Mobilio, Norman Sollenberger, Mildred Carlisle, Margaret Llanagan, Mary Connolly, Jo May Zeisig, Emmie Sing, Thomas Hynes and Fannie Wasserman. They were duly elected.

Mr. Leberknight thanked Mr. Malamisuro for his efforts in behalf of the Association in enlisting these hospital pharmacists as associate members.

The secretary moved that those from this vicinity who had joined the A. P. H. A. during the past year,

but who had not yet been added to our rolls, be elected as members of the Branch. The motion was adopted.

At the request of the chairman, a motion was carried that a committee be appointed to coöperate with the Hospital Sub-group.

Professor Cook introduced Leonard G. Rowntree, M.D., Director of the Philadelphia Institute for Medical Research. He spoke on the "Chemical and Clinical Studies of the Adrenal Glands." The discussion covered (1) the clinical aspects of diseases of the adrenal glands, (2) the chemistry of the adrenal glands, (3) various preparations of extracts of the glands, (4) a discussion of the chemistry of Addison's disease, (5) discussion of the chemistry of the adrenal preparations, (6) the effects of these preparations on the chemistry of patients with Addison's disease.

Dr. Rowntree's extensive knowledge of his subject, his ability as a speaker and skilful use of slides made it an educational and interesting lecture.

Dr. Rowntree graciously answered many questions during the discussion period following his talk.

A rising vote of thanks was accorded the speaker and the meeting adjourned at 10:30 P.M.

R. H. BLYTHE, *Secretary*

ST. JOHN'S UNIVERSITY COLLEGE OF PHARMACY STUDENT BRANCH.—The meeting was held on Tuesday, April 2nd, in Room 402 of the college at 1:00 P.M. Professor Corcoran introduced the speaker, Dr. C. T. Chiaramonte, dermatologist to several Brooklyn Hospitals and diplomat of the American Board of Dermatology and Syphilology, who addressed the group on the topic, "Prescriptions of the Dermatologist."

Dr. Chiaramonte reviewed quite thoroughly the types of treatment of various dermatoses by external application. Especially emphasized were the importance of selection and concentration of ingredients; proper diffusion or even distribution in the finished prescription; and the method of application. The properties and specific indication for the use of ingredients most commonly prescribed in topical treatment by baths, wet dressings, powders, emulsions, lotions, ointments, etc., were discussed in some detail.

Following the talk, Dr. Chiaramonte answered questions from the audience. A rising vote of thanks was accorded the speaker.

SISTER M. ETHELDREDA, *Secretary*

SOUTHERN COLLEGE OF PHARMACY STUDENT BRANCH.—The first meeting was held on April 15th. The following officers were elected: *President*, J. R. Eaves; *Vice-President*, Jim Pantello; *Treasurer*, L. H. Turner; *Secretary*, Annette Williams.

The Constitution was read and the newly elected officers told their duties. Ideas for programs were also discussed. Plans were made for a guest speaker, Mr. Joseph Bransky. Since he is such an

interesting person, it was decided to invite the entire student body.

On Friday, April 19th, the Branch sponsored a program of exceptional interest. Mr. Joseph Bransky, Federal Narcotic Agent, was speaker. Besides addressing us he showed a very beautiful colored film on Marihuana Cigarettes. He is a delightful person with a sincere interest in pharmacy and we thoroughly enjoyed his talk and picture.

Following the program Mr. Bransky was guest of honor at a luncheon, attended by thirty students and guests. The affair was strictly informal and a number of impromptu talks were made, including one by Dean R. C. Hood, who is faculty adviser for our organization. Miss Joyce Smith, pharmacist at Georgia Baptist Hospital, and a graduate of our school, was one of our guests. During the luncheon James Lawson, a freshman at our school, and his sister Josie, played the xylophone for us. They are really good. We all had such a grand time that we decided to make it a regular monthly event.

On Monday, April 22nd, our Branch, through the influence of Mr. Z. O. Moore, secretary of the Georgia Pharmaceutical Association, sponsored a very interesting and instructive picture on crude drugs put out by S. B. Penick & Co. Much of the film dealt with the growing of Hydrastis.

ANNETTE WILLIAMS, *Secretary*

STATE COLLEGE OF WASHINGTON STUDENT BRANCH.—The meeting was called to order February 28th by President Gilbert Whipps. Minutes of the last meeting were read and approved.

Mr. John Lilienthal, district representative of the Northwestern Mutual Life Insurance Company, was introduced. He began his talk by stating that insurance protected a person's family in case he did not live long enough, and protected himself against living too long. Other uses of insurance are to protect partnerships, heads of business firms, for bequests, to pay taxes and fees on real estate after death. Mr. Lilienthal divided life insurance into three kinds, namely: term insurance, life insurance and endowment policies. The first may be used for a man in business or a very young person just entering business. Life policies may be paid up in any length of time, such as five, ten or twenty years. After the talk, Mr. Lilienthal answered many questions concerning insurance policies.

President Whipps called the meeting to order on April 10th. There being no objection he dispensed with the reading of the minutes and introduced Mr. De Boest, District Sales Manager of Eli Lilly & Co.

The topic of Mr. De Boest's talk was "The Sales Policy of Eli Lilly & Co.," which stresses the im-

portance of the complete chain of distribution from manufacturer, to wholesaler, to pharmacist, physician and finally patient. Each must fill his proper place, *i. e.*, the physician should not dispense and the pharmacist should not prescribe.

Vice-President Banich called the meeting to order on April 24th. There being no objections he dispensed with the reading of the minutes of the previous meeting. He introduced Mr. Theron Duerfeldt, proprietor of the Columbia Pharmacy in Spokane, and a member of the Board of Managers of the Washington State Pharmaceutical Association.

In Mr. Duerfeldt's talk he compared the vitamins with necessary business qualifications. Vitamin A he compared to a person's attitude. He compared vitamin B to business ability, with factors such as inherent ability, trained ability, character, honesty and other unknown factors. Vitamin C was compared to coöperation, and vitamin D to dependability. Vitamin E was similar to energy and ethics. Vitamin G was like grit, a necessary factor in business. He maintained everyone should avail himself of as much of each of these factors as possible.

The following officers were elected to serve during the coming year: *President*, Robert Honodel; *First Vice-President*, Carlton Peterson; *Second Vice-President*, William Rack; *Reporter*, Clarence Helgeson; and *Secretary-Treasurer*, Haakon Bang.

HAAKON BANG, *Secretary*

WESTERN NEW YORK.—The last meeting of the year was held in Foster Hall on the University Campus on May 2nd, at 8:30 P.M.

H. W. Stewart, assistant manager of the Buffalo Convention and Tourist Bureau, discussed the possibilities for entertaining the National organization in Buffalo in the near future. Since this group has not been in Buffalo since 1924, Dean Lemon said that the Branch should be prepared to act as host within the next five years.

The following officers were elected: *President*, W. L. Seibert; *First Vice-President*, J. Raymond Bressler; *Second Vice-President*, Carlton W. Cofran; *Secretary-Treasurer*, George W. Fiero; *Delegate to the House of Delegates*, Mearl D. Pritchard.

During the next two hours the members discussed the new Practical Pharmacy Edition of the JOURNAL. All felt that Editor Kelly has done an excellent piece of work. The retailers believe that they now have a Journal that they can read and one that is designed for their use. They felt that the new Journal will be in sufficient demand so that the higher class of pharmacist will want to belong to the A. PH. A. in order to receive this publication.

MARGARET C. SWISHER, *Secretary*

IN THE NEWS

Visitors.—Among those visiting the AMERICAN INSTITUTE OF PHARMACY during May were the following: J. W. Gayle, Frankfort, Ky., and daughter; Mr. and Mrs. A. C. Meyer, St. Louis, Mo.; A. L. Markuze, Washington, D. C.; Frand Kephart, Traverse City, Mich.; Stanley H. Bruckheim, Jamaica, N. Y.; James J. Costello, Washington, D. C.; Philip Schneider, Jersey City, N. J.; Mrs. A. C. Johnson, Washington, D. C.; Mrs. Emily K. Hilton, Socorro, N. Mex.; Juan P. Sozzi, Buenos Aires, Argentina; Alberto J. Llacer, Rosario, Argentina; Mr. and Mrs. F. W. Connolly, Boston, Mass.; D. L. Vivian, Washington, D. C.; Dr. Francisco Hidalgo, Habana, Cuba; Mr. and Mrs. Julius A. Koeh, Ocala, Fla.; G. C. Marshall, Arlington, Va.; Dr. G. M. Cestino, Habana, Cuba; E. Donald Preston, Washington, D. C.; John E. Ryan, Philadelphia, Pa.; Dr. and Mrs. E. F. Cook and son, Philadelphia, Pa.; E. E. Blakely, Malvern, Ark.; E. L. Cohen, Philadelphia, Pa.; Daniel L. Wertz, Johnstown, Pa.; Raymond Pietrzycki, Camden, N. J.; Robert Sparkman, Philadelphia, Pa.; H. P. Vaughn, Philadelphia, Pa.; Velma L. Meckley, Altoona, Pa.; Esther Sino-master, Sellersville, Pa.; D. A. Sinksie, Brooktondale, N. Y.; Wm. F. Mears, Ambler, Pa.; G. W. Perkins, Philadelphia, Pa.; R. J. Kohn, Philadelphia, Pa.; Max Tepper, Philadelphia, Pa.; Bernard Witlin, Philadelphia, Pa.; David Perlstein, Newark, N. J.; Murray Finklestein, Philadelphia, Pa.; Helen Forman, Trenton, N. J.; F. B. Spare, Royersford, Pa.; Ralph Williams, Jr., Palmerton, Pa.; Lydia C. Juresco, Philadelphia, Pa.; Albert I. Golcki, Philadelphia, Pa.; Isadore Fine, Philadelphia, Pa.; Joseph Greenberg, Philadelphia, Pa.; Albert Magen, Upper Darby, Pa.; Harry Rubino, Philadelphia, Pa.; Edward W. Rees, Darby, Pa.; Harold F. Poomeler, Maple Shade, N. J.; Marshall Garzarella, Philadelphia, Pa.; Anne O'Neill, Philadelphia, Pa.; R. G. Johnson, Harrisburg, Pa.; Ross W. Ritter, Jr., Philadelphia, Pa.; Nathan Rubin, Philadelphia, Pa.; Raymond Hall, Ashland, Ky.; Elizabeth Kriehel, Watertown, N. Y.; S. L. Ross, Toronto, Can.; Patrocínio Valenzuela, Philippines; Felix Hocson, Philippines; J. E. Bush and son, Atlanta, Ga.; J. Lester Hayman, Morgantown, W. Va.; Eugene Kosso, Brooklyn, N. Y.; Mrs. A. P. Williamson, Brooklyn, N. Y.; Khasem Pangrsvongse, Philadelphia, Pa.; E. P. Stout, Detroit, Mich.; L. D. Edwards, Cleveland, O.; L. W. Rowe, Detroit, Mich.; Mrs. Clara B. Miller, Topeka, Kans.; R. C. Hood, Atlanta, Ga.; H. C. Hallam, Evansville, Ind.; J. G. Roberts, Washington, D. C.; W. F. Gidley, Austin, Tex.; C. O. Lee, LaFayette, Ind.; Oscar P. Kimmel, Brooklyn, N. Y.; George R. Christ, Brooklyn, N. Y.; Esther H. Barney, Chicago, Ill.; Wilbur L. Sco-

ville, Gainesville, Fla.; P. A. Foote, Gainesville, Fla.; M. B. Matloek, Washington, D. C.; F. L. Geiler, Morgantown, W. Va.; Dr. and Mrs. G. L. Webster, Chicago, Ill.; Isabel Kippen, Edmonton, Can.; Hazel E. Landeen, St. Paul, Minn.; G. A. Emerson, Morgantown, W. Va.; A. O. Mickelsen, Portland, Ore.; Cosmo Ligorio, Brooklyn, N. Y.; Herbert Gaukenheimer, New York City; Rodney A. Barb, Parsons, W. Va.; John J. Corcoran, Brooklyn, N. Y.; F. A. McFarlin, Washington, D. C.; Dr. and Mrs. C. E. F. Mollett, Missoula, Mont.; Albert Bunin, Wilmington, Del.; G. W. Brittingham, Wilmington, Del.; G. W. Rhode, Newark, Del.; Curt P. Wimmer, New York City; J. A. Patterson, Martinsburg, W. Va.; H. H. Schmid, Chicago, Ill.; J. H. Riemenschneider, Chicago, Ill.; Mr. and Mrs. R. S. Lehman, Brooklyn, N. Y.; Mrs. Elsie M. Keale, Garden City, N. Y.; P. A. Paul, Conemaugh, Pa.; Anna E. Grosso, New York City; C. E. Rickard, Harrisburg, Pa.; C. B. Hay, Fargo, N. Dak.; R. C. Hanson, Streeter, N. Dak.; C. T. Eidsmoe, Brookings, S. Dak.; A. P. Gegenheimer, Cleveland Hts., O.; F. J. LeBlanc, Brookings, S. Dak.; Worth Howard, Akron, O.; Mr. and Mrs. J. T. Matousek, Cleveland, O.; L. W. Funk, Columbus, O.; Edward Spease, Cleveland, O.; H. G. Baskind, Cleveland, O.; Sigmund Waldbott, Cincinnati, O.; E. B. Fischer, Minneapolis, Minn.; Mrs. T. W. Hoskins, Louisville, Ky.; Carl Whorton Gadsden, Ala.; E. D. Mayo, Kalamazoo, Mich.; W. W. F. Enz, Kalamazoo, Mich.; J. H. Kidder, New York City; Dr. O. F. A. Canis, New York City; E. M. Josey, Frankfort, Ky.; M. H. Vaughn, Bowling Green, Ky.; F. A. Britt, Evansville, Ind.; H. H. Gerding, Ft. Wayne, Ind.; Alan Hisey, Washington, D. C.; W. F. Ambroz, Indianapolis, Ind.; Edward H. Niles, Indianapolis, Ind.; Mr. and Mrs. L. W. Griffin, Allston, Mass.; C. J. Zufall, LaFayette, Ind.; C. J. Clayton, Denver, Colo.; Ura O. Musick, Colorado Springs, Colo.; Ira V. Rothrock, Mt. Vernon, Ind.; W. B. Challman, Mt. Vernon, Ind.; Dorothy L. Collins, Providence, R. I.; J. F. McCloskey, New Orleans, La.; Luther Burton, Philadelphia, Pa.; Norman H. Skull, Philadelphia, Pa.; G. F. Emich, Toledo, O.; Bess G. Emich, Toledo, O.; Ann Puchiam, Cleveland, O.; Dr. and Mrs. E. L. Cataline, Toledo, O.; A. F. Schlichting, Ferguson, Mo.; George Judisch, Ames, Iowa; R. E. Terry, Chicago, Ill.; E. O. Kagy, Des Moines, Iowa; R. L. Crowe, Memphis, Tenn.; Mr. and Mrs. L. C. Zopf, Iowa City, Ia.; Mr. and Mrs. H. H. Gibbs, Iowa City, Ia.; A. Zieffle, Corvallis, Ore.; G. W. Hargreaves, Auburn, Ala.; E. D. Stanley, Madison, Wis.; C. V. Netz, Minneapolis, Minn.; L. M. Parks, Madison, Wis.; Denny Brann, Des Moines, Ia.; Maybelle Fer-

nald, Chicago, Ill.; Neulon Deahl, Detroit, Mich.; N. C. David, Corvallis, Ore.; F. T. Gillespie, St. Joseph, Mich.; Harvey Donnell, Portland, Ore.; R. L. McCabe, Detroit, Mich.; J. K. Attwood, Jacksonville, Fla.; H. A. K. Whitney, Ann Arbor, Mich.; S. H. Dretzka, Milwaukee, Wis.; E. S. Schweger, Green Bay, Wis.; S. W. Morrison, Oak Park, Ill.; Mr. and Mrs. H. H. Thompson, Ballston, Va.; Evelyn Gray Scott, Cleveland, O.; Mr. and Mrs. J. B. Burt, Lincoln, Nebr.; Mr. and Mrs. Aldert Molenaar, Arlington, Va.; Dorothea E. Klemme, Washington, D. C.; C. J. Klemme, LaFayette, Ind.; Dr. and Mrs. C. B. Jordan, LaFayette, Ind.; J. H. Lindahl, Chicago, Ill.; W. G. Rupp, Toledo, O.; Edgar Stipe, Portland, Ore.; W. A. Jarrett, Omaha, Nebr.; W. F. Jones, Watertown, S. Dak.; J. J. Shine, Chicago, Ill.; T. W. Hoskins, Louisville, Ky.; Mrs. George A. Moulton, Peterborough, N. H.; W. R. Huffman, Richmond, Ind.; E. K. Stamm, Chicago, Ill.; Raul Valdeavellano, Guatemala City, C. A.; and Arno W. Reinhardt, Rockford, Ill.

The American Hospital Association will hold its 42nd convention, September 16th to 20th, in Boston.

The Kentucky State Pharmaceutical Association met in Paducah, June 11th to 13th. Among the speakers were: L. O. Heideman, A. C. Nielsen Co., "Facts about the Retail Drug Trade;" Dr. John R. Pate, Director, Bureau Venereal Disease, Board of Health, "Pharmacists' Part in the Fight against Venereal Diseases;" Theodore Christianson, N. A. R. D. Staff, "The Retail Druggist in 1940;" P. W. Bullock, Dr. Pepper Co., "Market Trend at the Soda Fountain;" William Curry, "How to Sell Cameras and Camera Supplies in a Drug Store;" J. H. Paschal, of Owens-Illinois Glass Co., presented a picture in technicolor, "Quality Control."

The University of Southern California held its first annual Pharmacy Alumni Conference on May 20th. Those on the program were: Lewis Gough, Address of Welcome; Paul Tarlton, Response; W. F. Copeland, "Message to Pharmacists;" J. A. Foley, "Some Problems in Law Enforcement Relative to the Drug Industry;" A. R. Mass, "Pharmacy as a Requisite for Chemical Manufacturing;" W. A. Daniel, "Discussion of pH ," E. R. Coar, "Recent Developments in Vitamin;" E. M. Dahlquist, "Sex Hormones and Related Compounds;" Frank Titus, Jr., "Professional Prescription Service."

A new rôle for vitamin B₁, that of protecting blood vessels from damage, was discovered in experiments by Dr. Leo Alexander of Boston, it was reported to the American Association of Pathologists and Bacteriologists at Pittsburgh.

OBITUARY

Edward T. Bischoff

Edward T. Bischoff, president of Ernst Bischoff Company, Inc., Ivoryton, Conn., manufacturers of pharmaceutical and textile mill specialties, died on May 25th, at New Haven Hospital, New Haven, Conn., after a short illness.

Mr. Bischoff, who was thirty years old and a graduate of the Philadelphia Textile High School, was stricken on his arrival at his home in Essex, Conn., from Florida, aboard his yacht, the *Saunterer*.

He is survived by his wife, Elsie Guthrie Bischoff, two children and two sisters, Ilse Bischoff of New York and Mrs. H. Graves Terwilliger of Peapack, N. J.

Mr. Bischoff was a member of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Andrew E. Roedel, Sr.

A. E. Roedel passed away at his home in Cheyenne, Wyo., April 25th, following a heart attack. His death came as a shock to his associates and friends, of whom he had many. In his passing pharmacy lost a leader of great worth. A higher standard for pharmacy, through organization and coöperation, was his goal.

For fifty-one years Mr. Roedel had operated the drug store, in Cheyenne, which bears his name. He was born on a farm near Defiance, Ohio, was educated in the public schools of Defiance and Detroit, and at the Cincinnati College of Pharmacy. At the age of twenty-one he went west seeking adventure and a job and landed at Cheyenne where he secured employment at the Pierce-Magill Drug Store—Wyoming's first drug store. A year later he went to Leadville, Colo. In 1889 he returned to Cheyenne and established his own store, which has been remodeled, enlarged, and to-day is one of the finest stores in that section of the country.

In 1939 Mr. Roedel retired as president of the Wyoming State Board of Pharmacy, after serving many years. He was a charter member of the Wyoming Pharmaceutical Association and served as its president four times. He served on the School Board and was a charter member of the Chamber of Commerce. He had many business interests outside of his drug store, including banking connections, and was a vice-president of the Rocky Mountain Druggist Publishing Co. He was a member of the Masonic, Elks and Knights of Pythias lodges, and for more than forty years had been a vestryman at St. Mark's Episcopal Church.

Surviving are Mrs. Roedel and their two sons, John Roedel of Casper and A. E. Roedel, Jr., of Cheyenne, who probably will continue his father's business.

GENERAL NOTICES

Remittances. Annual membership dues, subscriptions, notices of changes of address, orders for subscriptions and back numbers and claims for missing numbers should be sent to Secretary E. F. Kelly, 2215 Constitution Avenue, Washington, D. C.

Claims will not be allowed for copies of journals lost in the mails unless such claims are received within sixty days of the date of issue, and no claims will be allowed for issues lost as a result of insufficient notice of change of address—ten days' advance notice is required.

Responsibilities for Statements Published. The AMERICAN PHARMACEUTICAL ASSOCIATION and the Editor of the Practical Pharmacy Edition of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION assume no responsibility for statements and opinions advanced by contributors to THIS JOURNAL.

Advertising. For information regarding advertising in THIS JOURNAL or the other publications of the ASSOCIATION, address Secretary E. F. Kelly 2215 Constitution Avenue, Washington, D. C.

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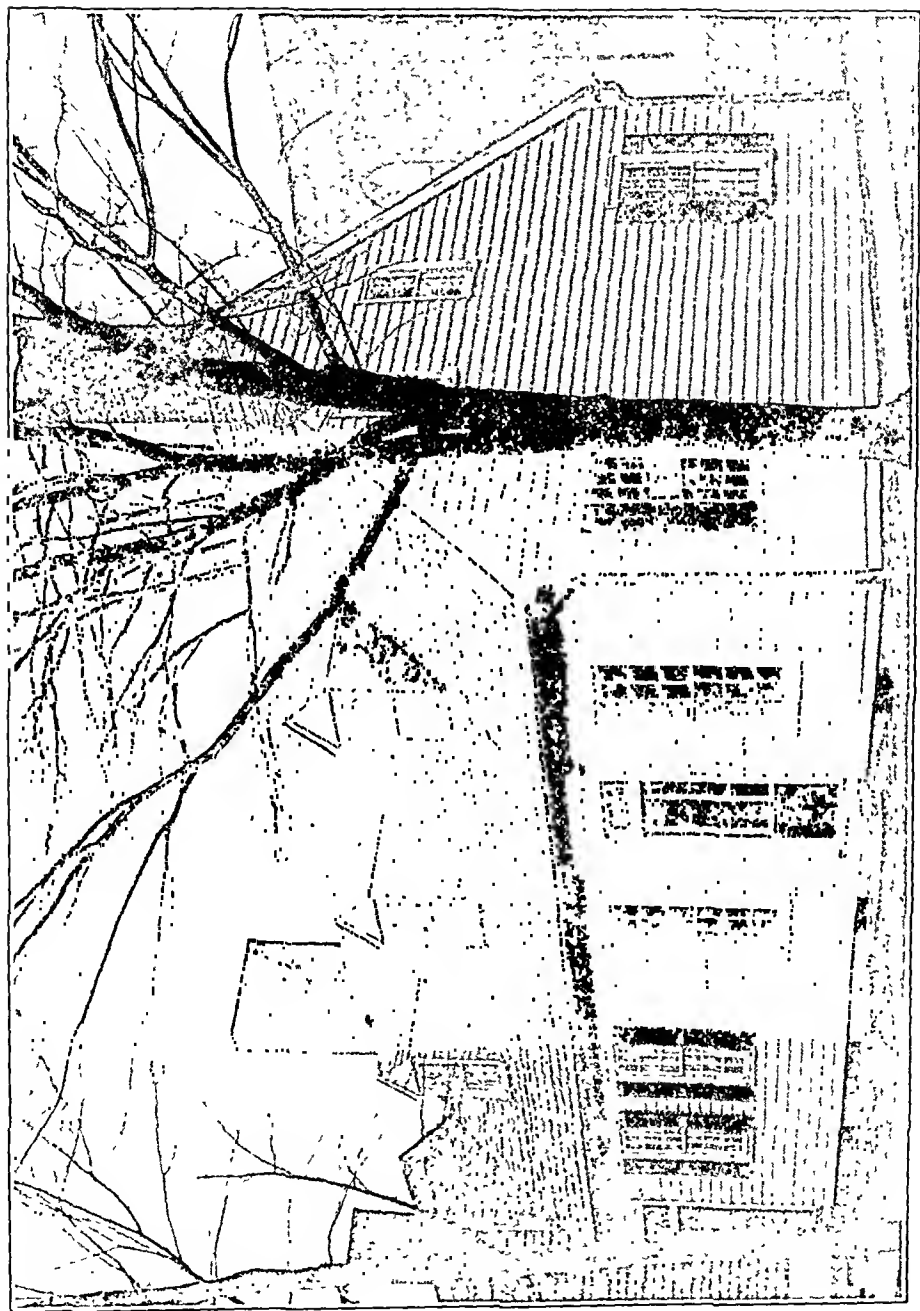
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No claims will be allowed for Journals lost in the mails due to: Failure to notify of change of address (thirty days' notice required); after a lapse of three months; failure to receive wrappers from returned Journals.

Entered as second-class matter January 23, 1917, at the Post Office at Easton, Pa., under the act of March 3, 1879, as 24 times a year: Scientific Edition monthly on the fifth. Practical Pharmacy Edition monthly on the 20th. Acceptance for mailing at a special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 10, 1918.



Courtesy of the Virginia State Chamber of Commerce

THE HUGH MERCER APOTHECARY SHOP

Representatives of the Citizens Guild, of Fredericksburg, Va., which some years ago bought and restored this apothecary shop, which was owned and operated by Gen. Hugh Mercer, and in which General Washington maintained an office for many years while residing in Fredericksburg prior to the Revolutionary War, offered to deed the shop and its contents to the AMERICAN PHARMACEUTICAL ASSOCIATION in fee simple in order to assure its permanent preservation. The Apothecary Shop was located in the room on the right and the remainder of the building was used as a residence.

Practical Pharmacy Edition

Journal of The American Pharmaceutical Association

E. F. Kelly, Editor, 2215 Constitution Ave., Washington, D. C.

State Association Contacts

Since the AMERICAN PHARMACEUTICAL ASSOCIATION meeting in Richmond, Va., I have visited several state conventions and colleges of pharmacy. At these meetings I have talked to many students and to hundreds of pharmacists, some comparatively young, others with many years' experience. In every instance I found a decided feeling of optimism as to the future of pharmacy. Not only was this true among the young men and young women now in college, who naturally feel the urge to go out and "find new worlds to conquer," but also among those retail pharmacists of many years' experience who have seen the pendulum swing away from the ideals of the profession. All of them expressed the definite opinion that pharmacy had found itself; that the professional side is again beginning to receive the attention it should receive.

Young men told me of their plans to clean up, to modernize and to put proper emphasis upon the prescription department; to see that the prescription department represented the center attraction around which all other departments should be grouped.

On all sides I found open displays, streamlined back bars, blonde fixtures and many other innovations which indicated that the trend to modernize was definitely under way.

In nearly every instance it was self-evident that the prescription department was the hub around which all departments of the store were being built. These changes were given as the reason for entering the profession by many of the young women contacted at the colleges and student branches. They felt that pharmacy offered more and that its future was brighter than heretofore. After seeing the present high-type personnel and talking with them one is immediately impressed with the fact that the future of American pharmacy is in safe hands.

To witness the Blue Key award of a beautiful silver loving cup to the Student Branch of the A. P. H. A. at Loyola University, as the outstanding student organization on the campus, was to me a source of inspiration.

These observations cannot help but be heartening to those of us who have labored long and waited eagerly for the pendulum to swing back to the practice of pharmacy of days gone by. They give us new hope and new courage to continue the work and to carry

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the message into all places where pharmacy is practiced. For after all it must be carried into every drug store in order that the public may see pharmacy in its true light and recognize its real worth in the public health program.

This is the opportune time to sell pharmacy to the public. Support your Colleges of Pharmacy, your Boards of Pharmacy, local, state and national Associations. Make your presence felt in the Public Health Program of your state. Demand a place and have a voice in all boards, agencies and committees and other organizations affecting the health of your people.

We have remained silent too long; we have been too modest. Launch a program of publicity in all matters pertaining to pharmacy. Convince the public that pharmacy is a profession and is really doing things. Make the people pharmacy-conscious. I call upon each member, especially among the retail group, to make of his store an educational center and to distribute in an intelligent manner the information, the advice and the service the public demands daily at the corner drug stores of our country.

CHARLES H. EVANS, *President*,
AMERICAN PHARMACEUTICAL ASSOCIATION

National Formulary Revision

A considerable amount of information concerning the progress of National Formulary revision work is included in the combined May-June-July issues of the *Bulletin of the National Formulary*. The three monthly issues were combined as a matter of convenience for those interested in referring to the final action taken by the National Formulary Committee on more than one hundred items. As a result this issue of the *Bulletin* includes several times as much material as is ordinarily published in a single monthly issue.

Under the section headed "General Notices," changes which will appear in the Seventh Edition of the National Formulary are included. Revisions which have been made in monographs since the publication of the August-September 1939 number of the *Bulletin* and other revision changes are noted in the chapter devoted to Monographs on Drugs, Chemicals and Preparations. A number of new monographs appear for the first time in this section. However, more than half of this latest issue of the *Bulletin* is allotted to the presentation of new and

revised material which will be included in the chapter of N. F. VII on Materials and Preparations for Diagnostic Use. This chapter, as it appears in N. F. VI, has undergone more extensive revision than any other section of the book. While this revised chapter was published in the January 1939 number of the *Bulletin*, monographs for many of the ingredients of the preparations for diagnostic use are published in the May-June-July issue for the first time.

This latest issue of the *Bulletin* of the National Formulary Committee is printed instead of being planographed, thus making it possible to present new and revised monographs in essentially the same style in which they will appear in the Seventh Edition of the National Formulary. The *Bulletin* contains more than one hundred pages and is provided with an unusually complete index. In addition to supplying regular subscribers, a limited number of extra copies have been printed. Single copies may be obtained from the Editor of the *Bulletin*, 2215 Constitution Avenue, N. W., Washington, D. C. for \$1.50 per copy.—J. L. P.

National Defense Program

The large majority of the state pharmaceutical associations that held their annual meetings late in May or during June have adopted resolutions proffering the assistance of their members in every manner possible in the program to provide adequate defense for our country. Needless to say, this reflects the attitude of the entire profession and industry.

Fortunately, great progress has been made since the World War in establishing the status of pharmacy as a profession and in building up its personnel in the various branches of the governmental service. These groups of pharmacists will serve as a nucleus through which additional personnel can be trained much more quickly and satisfactorily. In addition an increased number of pharmacists hold commissions in various branches of the organized reserves and have served in the national

guard, and have in these positions secured more or less military training. The enrolment being carried on by the American Red Cross is another plan.

However, much is to be done if the pharmaceutical service is to be kept abreast of the rapid expansion of the armed forces and if provisions are to be made which will insure that pharmacists will serve, in case of emergency, in the capacity for which they have been trained.

The A. PH. A., through its offices in Washington and with the coöperation of its Committee on the Status of Pharmacists in the Government Service, is keeping in close touch with developments and has offered its assistance in working out satisfactory plans for using the services of the pharmacists of the nation to the best advantage in the event of any emergency.—E. F. K.

Research Awards

The A. PH. A. Committee on Pharmaceutical Research wishes to announce the availability of certain limited funds for research grants. These grants are to be made by the Council of the A. PH. A., on the recommendations of the Committee on Pharmaceutical Research. They are to be made on the following basis:

(a) the extent to which the award will serve to promote Pharmaceutical Research;

(b) whether the award supplements the A. PH. A. laboratory program;

(c) the qualifications of those who will perform the work for which the award is made and the facilities of the laboratory where the research will be conducted;

(d) preference will be given to applications wherein the award will supplement a contribution from the institution or laboratory in which the research will be conducted.

Those interested in being considered for the above awards will please make application promptly to the Chairman of the Committee on Pharmaceutical Research (Francis

E. Bibbins, 150 West 64th St., R. R. 16, Box 728-B, Indianapolis, Ind.) and included in this application should be all the details which will enable the Committee to carefully evaluate the projects listed in the application; particularly giving in detail the data mentioned in the above paragraph outlining the basis on which these awards are to be made. These applications should be forwarded promptly so that they can be given consideration before the opening of the college year this fall.

CORRECTION

In connection with Resolution No. 29, as printed on page 195, of the Practical Pharmacy Edition for May 1940, it should have been stated that this Resolution "was referred to the Council for further action."

The Value of Bioassay to the Pharmacist

By Harald G. O. Holck

"How do you know how strong this medicine is?" would seem a legitimate question from any patient coming to get a prescription filled. In the majority of cases the practicing pharmacist with his intensive training in chemical assay would have no great difficulty in answering such a question intelligently, especially to customers who know a little chemistry. However, a smaller group of drugs consists of substances, as yet imperfectly known and not capable of being analyzed by chemical procedures. Although this group is relatively small, it contains a number of medicines of first-rate importance and sold daily in every pharmacy. For example, the pharmacist may be asked about digitalis, insulin, pituitary and sex hormones and the various vitamins. Obviously, without practical experience in assaying such preparations, the pharmacist may not be able to give understandable answers to his customers or intelligible replies to the physicians of his neighborhood who wish to be kept informed of the recent advances in this field.

Therefore, as part of the training of the pharmacist, the schools in their courses in pharmacology include some of the fundamental ideas of bioassay with some simplified laboratory work or demonstrations of the assay of a few of the drugs that must be evaluated by animal testing, such as digitalis, insulin and ergot. In recent years an increasing number of colleges of pharmacy have added separate courses in biological assay to their curricula. This has partly become necessary because the number of medicines that must be assayed by such procedures has increased; also the older methods did not fully take into account the variability occurring from time to time in the responses of animals of the same stock or of animal colonies in different localities; the better understanding of this has led to the development of a growing series of reference standards with which the unknown preparations are compared.

These advances have also necessitated the teaching of simpler mathematical methods

used in distinguishing between what is a significant difference between the standard and the unknown and what is simply a variation to be expected owing to the fact that in practice relatively small numbers of animals are used in such procedures. It would naturally be possible in subdividing such groups to place by chance a larger proportion of more highly resistant animals in one group than in another of similar size.

In such training of the pharmacy student it is essential that he carry out most of this work himself or that the experiments be done by small groups of students. It is only by such methods that the student not only learns how to evaluate the strength of the medicine, but also gains familiarity with the major therapeutic and toxic actions of the medicines under study. In case of digitalis he thus learns not only about the slowing of the pulse and the action upon the heart muscle, but also about its emetic action. The assay of insulin not merely teaches him that the blood-sugar is being decreased, but also that confusion, convulsions and prostration may occur after an overdose and what to do about this; incidentally he also learns more about diabetes.

In case of assays upon hormones and vitamins the student secures first-hand information concerning deficiency symptoms following removal of some of the glands of internal secretion and of the effects of lack of various vitamins in the diet and becomes experienced in carrying out frequent observations upon animals which were being fed such deficiency diets. The words scurvy, rickets, beri beri and xerophthalmia would not be just names, but the future pharmacist obtains and carries with him a clear picture of the major symptoms of these important deficiency diseases.

The teaching of such courses also demands that the student be impressed with the fact that the experimental conditions must be controlled, because any changes in storing of animals and their diets, omission of preliminary fasting, the temperature at which the experiments are being conducted, the

size and sex of the animals and changes other factors may seriously alter the results. Of course, the careful preparation and storing of the drugs in question and the exact techniques of administration must be mastered. The relative accuracy of the various methods is also considered.

For conducting of bioassay experiments the modern school of pharmacy naturally must provide suitable facilities for housing various animals, tanks in which the temperature of the water can be controlled, devices for measuring blood pressure, good balances and other apparatus.

From the foregoing it will appear that the pharmacy student who has taken a course in bioassay not only possesses a balanced knowledge of both chemical and biological methods of assay, but in addition has gained valuable information concerning actions of medicines, various diseases and the factors that modify drug action—knowledge that enables him better to explain and discuss any questions that his ever more-informed patrons or his neighborhood physicians may care to ask him.

1941 A. PH. A. Convention

A meeting of the committee for the 1941 convention of the AMERICAN PHARMACEUTICAL ASSOCIATION was held June 11th, at the Hotel Statler, Detroit, Michigan. Following an enjoyable complimentary dinner served by the hotel, the meeting was called to order at 8:00 o'clock by Ben Bialk, chairman. R. S. Warner was appointed secretary for the meeting.

Mr. Bialk thanked those members present who attended the convention of the A. Ph. A. in Richmond, Va., in May 1940 and who worked to get the 1941 convention at Detroit. He also read a letter from Dr. E. F. Kelly, general secretary of the A. Ph. A. recommending that the Local Secretary and the Headquarters Hotel be selected as early as possible.

A motion was made by Leonard Seltzer and seconded by H. A. K. Whitney that the present chairman continue in that capacity. The motion was carried unanimously.

The chairman appointed H. A. K. Whitney, chairman, Walter Chase, Leonard Seltzer and R. L. McCabe as a committee to choose the hotel headquarters for the coming convention. The members of this committee are to meet at the Wayne County Medical Association building on Tuesday, June 18th.

A Publicity Committee consisting of Ernest Jones, chairman, R. T. Lakey, Walter Chase and Otis Cook was appointed.

Mr. Whitney said that the Council of the A. Ph. A. was impressed with the work of Dr. Negus in handling the publicity for the Richmond meeting. He raised the question of whether the services of Dr. Negus could be obtained for the 1941 convention. It was suggested by Mr. Chase that Mr. Rodman might work with Dr. Negus to get publicity for popular and scientific papers.

It was felt that committees on cars and entertainment should be appointed at a later date.

Members of the Plant Science Seminar Committee appointed were Prof. Clifford Glover, chairman, Professors Stocking and Blome and R. S. Warner. The committee will endeavor to bring the Seminar to Ann Arbor.

Dr. Seltzer and Professor Glover urged that meetings be scheduled so that as many evenings as possible be left open for entertainment. Promptness in starting the meetings was also urged by Dr. Seltzer who said that this should be accomplished by calling the chairmen of the different sections together and making them responsible for starting their sections on time.

Mr. Whitney was appointed chairman of the Committee on Programs. He is to appoint the other members of his committee.

Mr. Jones spoke of a membership drive and raised the question of when the membership year started. It was decided to write to Dr. Kelly concerning this matter.

A Finance Committee was appointed consisting of Mr. McCabe, chairman, Leonard Seltzer, J. H. Webster and A. J. Meyer.

Mr. Jones said that he felt that other committees should be appointed soon so that they could be making plans for their work even though the committees themselves had no meetings until fall.

Mr. Rowe raised the question of whether there were to be separate committees for registration and entertainment or whether they were to be combined. It was the general feeling that it would be better to have separate committees.

Mr. Cook was named to the membership committee and pledged his complete support for anything he or his office could do to aid the success of the convention.

Dr. Seltzer suggested that wives who had been active in the Auxiliary should form a nucleus for the

Entertainment Committee and that others should work with them.

Mr. Bialk asked for any other suggestions that might be made.

Mr. Meyers urged the early appointment of a Transportation Committee. Mr. Bialk named him as chairman of this committee.

Dean Stout said that he thought that the programs were too complicated and that it would be a good idea to simplify them as much as possible.

Mr. Cook asked that members of the Publicity Committee get the minutes of this meeting in order to aid in their work.

Dean Lakey raised the question of the time of the meeting. This will probably be decided by the Council.

Mr. McCabe asked who was to be the secretary for the convention. It was the general opinion that the secretary of the Local Branch should be both Chairman and Local Secretary.

It was decided to write Dr. Kelly concerning stationery for the convention.

Mr. Bialk said that each chairman was to handle the correspondence for his committee and that it would not be handled through a general secretary.

Mr. Cook offered the services of his office in making arrangements for entertainment for the convention.

It was the general feeling that no meeting should be scheduled, but that each should be ready to serve on call.

R. S. WARNER, *Secretary Pro Tem*

National Dental Program

By G. C. Schicks, Chairman

Arsenic compounds have been used successfully as local applications for the treatment of Vincent's infection. Arsphenamine and neoarsphenamine are used in 2.5 to 10% solutions, preferably in glycerin. Sulfarsphenamine is used in 2% concentration, but up to 6% may be used. Arsphenamine is sometimes dissolved in a 40% glucose solution in place of glycerin.

Fowler's Solution, Liquor Potassii Arsenitis, U. S. P., is occasionally desired for local application in acute ulcerous gingivitis or inflammation of the gum margins. Arsenic trioxide is not used locally for Vincent's infection or gingivitis. It is a protoplasmic poison and caustic. The arsenic compounds mentioned above are the ones which should be used. Such compounds are spirochetocides, which kill the organisms causing Vincent's infection, quite commonly spoken of as Trench Mouth.

A number of other drugs are also used to control this disease which can cause considerable trouble if it is not checked and ultimately cured. Such oxidizing agents as chloramine, hydrogen peroxide, hypochlorites, potassium permanganate and sodium perborate have proved useful. For astringent and escharotic action, copper sulfate, chromic acid, iodine, mercuric chloride, silver nitrate and trichloroacetic acid are used. Among the dyes used in the treatment of this disease are acriflavine, crystal

violet, brilliant green and pyridium. The first two are official. The official 3% solution of Methyl-rosaniline, also known as Solution of Gentian Violet or Crystal Violet, is an efficient application.

In the preparation of cavities for filling, infected areas are cleaned and all foreign material such as food particles, tartar and deposits from mastication are removed. In the process of cleansing the areas cavity rinses are used. The formulas for the most popular ones are given. Potassium permanganate and phenol in concentrations stated in the formulas are used as irrigating solutions. These substances are antiseptic and deodorant and are used for such purposes in aqueous solution in the treatment of foul ulcers and gangrenous areas on mucous membranes. Care should be used in handling potassium permanganate as explosions may occur with heavy trituration and particularly with organic material.

While it has no direct application, it might be well to state that potassium permanganate in 1-2% solution or in crystal form is efficient in snake bites if it is applied before the poison is absorbed. Camping and hiking in the fields and mountains are reasons for an increase in the number bitten by snakes each year.

Inquiry from Dentist

How can dental handpieces be sterilized?

On page 141, "Accepted Dental Remedies," 1939, the following statement is made:

"Experiments in which *B. anthracis* was used as the test organism indicate that light liquid petrolatum may be used for disinfecting the dental handpiece by heat. The handpiece is immersed in the liquid petrolatum and heated to 185° C. for five minutes (Appleton, J. L., Jr., "Sterilization of Handpiece," *Dental Cosmos*, 66:861, August, 1924)."

Prescriptions—Series VI

(a) R	Metric Approx.	Apoth. Equivalents
Neolarsphenaminæ	1.5 Gm.	gr. xxiii
Glycerini q. s. ad	15.0 cc.	℥ ss

M ft. sol. amber bottle

Sig: Apply on cotton swab three times a day.

Note: Treatment of Vincent's infection.

10% solution of Neolarsphenamine.

Clean ulcerated surface with physiological salt solution before application.

Keep in cool place protected from light.

Incompatibilities — Neolarsphenamine quickly decomposes in contact with air and forms dangerous poisonous compounds. Decomposed by mineral acids.

CAVITY RINSE

(b) R	Metric Approx.	Apoth. Equivalents
*Chloroform Solution of Thymol, 50%		
Thymol	15.0 Gm.	℥ iv
Chloroform to make	30.0 cc.	℥ i

*A. D. R., 1939, p. 256, No. 4.

(c) R	Metric Approx.	Apoth. Equivalents
Alcohol (95%)	88.0 cc.	℥ ii ℥ viiss
Dist. water q. s. ad	120.0 cc.	℥ iv

Note: Cavity rinse and disinfectant.

Alcohol 70%.

(d) R	Metric Approx.	Apoth. Equivalents
Thymol	15.0 Gm.	℥ iv
Alcohol, q. s.	30.0 cc.	℥ i

Note: Cavity rinse and disinfectant.

Alcohol solution of Thymol 50%.

(e) R	Metric Approx.	Apoth. Equivalents
Silver Nitrate	3.0 Gm.	gr. xlv
Distilled water q. s.	30.0 cc.	℥ i
Ammoniacal solution of silver nitrate and liquefied phenol are also used to disinfect cavities. Keep in brown dropper bottle. Do not plunge cotton applicator into bottle but drop solution onto cotton.		
Note: 10% solution.		

(f) R	Metric Approx.	Apoth. Equivalents
Phenol	0.3 Gm.	gr. v
Distilled water q. s.	60.0 cc.	℥ ii
Note: Phenol Solution 0.5% for irrigating.		

(g) R	Metric Approx.	Apoth. Equivalents
Potassium Permanganate	0.03 Gm.	gr. ss
Distilled water q. s.	60.00 cc.	℥ ii
Note: Potassium Permanganate Solution 1-2000 for irrigating.		

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
July 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

This is the sixth in the series of dental prescription formulas.

Vincent's infection is more prevalent during the summer months because of contamination likely to occur from drinking cups at picnics, outdoor drinking fountains and other sources of infection. We are prepared to supply you with the drugs used to treat this disease. A few of the efficient ones are chloramine, sodium perborate, silver nitrate, mercuric chloride, gentian violet and such arsenides as arsphenamine, neoarsphenamine and sulfarsphenamine. The latter three may be dispensed in glycerin or glucose solutions as you prefer.

You may find among the enclosed formulas your choice for a cavity rinse and disinfectant. If not, and you have one of your own, we should be pleased to prepare it for you.

May I draw your attention to the formulas for irrigations, foul ulcers and gangrenous areas on mucous membranes. They are deodorant as well as antiseptic.

Phone Humboldt-5670 and more information will be given if desired.

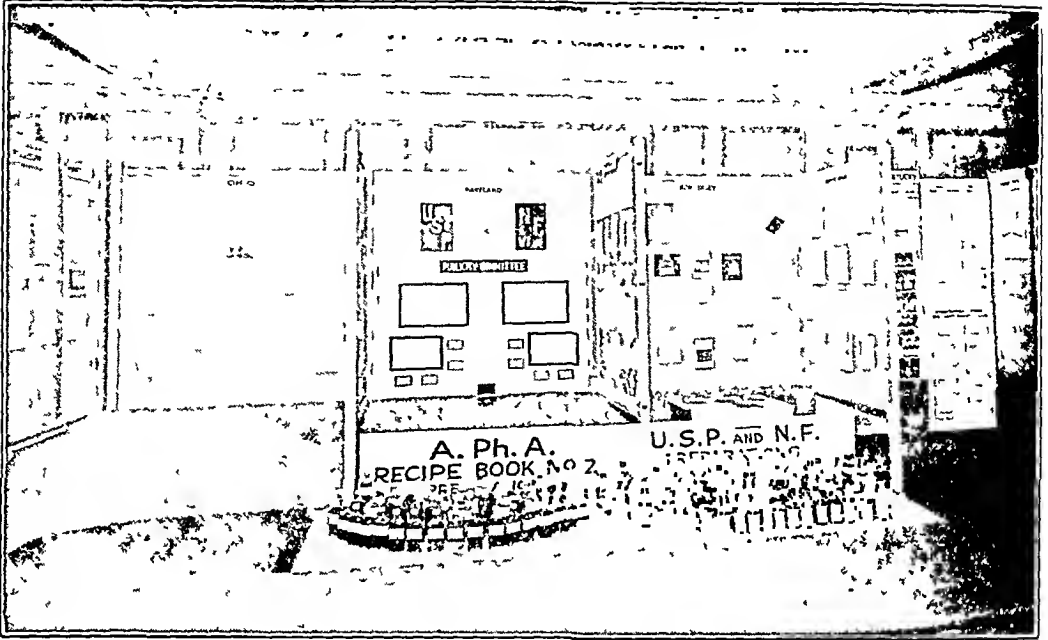
Very truly yours,

ROBERT W. HALE

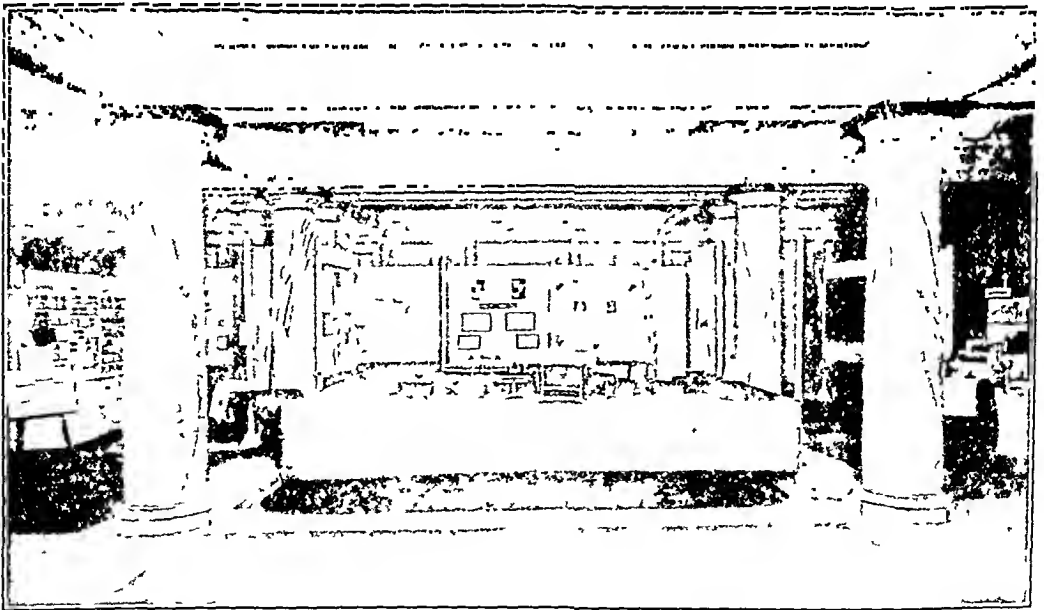
Prescription Pharmacist
to the Dental Profession

Scientific and Professional Exhibits

At the Richmond Meeting



At recent meetings of the ASSOCIATION an attempt has been made to develop exhibits illustrating the methods used in the various displays of products and apparatus employed in the Prescription Department. The accompanying photographs will give an idea



states in promoting professional relations and the use of official products. This effort has met a very encouraging response, and in addition an opportunity is provided for the of the number and scope of the exhibits which were located in the main lobby of the Hotel Jefferson at Richmond. The exhibits were arranged under the di-

rection of Dr. M. J. Andrews, Chairman of the Conference of State Committees on U. S. P.-N. F. Promotion.

The first group represents the type of material used in the various states by Interprofessional Relations or U. S. P. and N. F. Promotion Committee. Displays were prepared by the following: Alabama, Connecticut, District of Columbia, Indiana, Kansas, Kentucky, Maryland, Minnesota, Mississippi, New Jersey, New York Pharmaceutical Association and the Buffalo Academy of Pharmacy, Ohio, Pennsylvania, South Carolina, Virginia and West Virginia.

The second group of educational displays was prepared by the American Social Hygiene Association, the U. S. P. Revision Committee, the American Pharmaceutical Association Laboratory, the A. Ph. A. Recipe Book, II Committee, the National Dental Program and the American Association for Advancement of Professional Pharmacists.

The third group of displays was of special interest to the prescription pharmacists. The Becton, Dickinson & Co. illustrated the various steps required to prepare and test a clinical thermometer and a hypodermic syringe. The DeVilbiss Company displayed all the various types of atomizers, nebulizers, etc. A general line of labels and prescription containers was prepared by Drug Package, Inc., and the Pictorial Paper Package Corporation. The Owens-Illinois Glass Company displayed a line of prescription bottles, ointment jars, etc.

The displays were open to those attending the convention twenty-four hours each day throughout the week. They were unique as their purpose was to present new ideas and general educational information. There were no representatives at the various booths and many were seen taking notes during the early morning hours and late at night.

Additional Colleges Accredited

The following colleges of pharmacy have been added as of June 17, 1940, to the list of accredited colleges of pharmacy released by the American Council on Pharmaceutical Education on January 10, 1940. (The college starred is listed subject to reinspection in 1942.)

New York

Union University, Albany College of Pharmacy
Long Island University, Brooklyn College of Pharmacy
St. John's University College of Pharmacy

Rhode Island

*Rhode Island College of Pharmacy and Allied Sciences

Doses of Bromides and Acetanilide

The ASSOCIATION has received a number of requests for information in reference to the doses of the bromides and acetanilide, and the Food and Drug Administration has kindly furnished the following information:

"The Administration has expressed the opinion that preparations of the bromides ordinarily sold as medicines may be dangerous to health if under the directions for use the consumer will receive more than 30 grains of any one or a combination of the bromides during a period of one day; or more than 15 grains during any three-hour period.

"With respect to acetanilide the opinion has been expressed that preparations providing under the directions of use more than 5 grains in a single day, or more than $2\frac{1}{2}$ grains in any three-hour period may be dangerous.

"In the case of preparations containing both acetanilide and bromides, dosages exceeding 5 grains of acetanilide and 15 grains of bromides during a single day or more than $2\frac{1}{2}$ grains of acetanilide and $7\frac{1}{2}$ grains of bromides during any three-hour period may be dangerous."

During the Richmond meeting, in May, the American Association of Colleges of Pharmacy passed a resolution expressing thanks and appreciation to the AMERICAN PHARMACEUTICAL ASSOCIATION for the opportunity to use the Practical Pharmacy Edition of its JOURNAL for disseminating information concerning education to the druggists of the country.

NOTICE

We wish to extend our sincere thanks to all who kindly mailed in copies of the May JOURNAL.

Changes in Reciprocal Registration

Attention is directed to the following amendment to the By-Laws of the *National Association of Boards of Pharmacy*, adopted at the 1940 meeting held in Richmond, Va.:

"All applicants for reciprocal registration who are registered or licensed as pharmacists in their respective states on and after July 1, 1944 shall be required to be graduates of schools or colleges of pharmacy accredited by the Boards of Pharmacy of the respective states on the basis of accreditation by the American Council on Pharmaceutical Education; PROVIDED that the foregoing shall not apply to students duly enrolled on or before January 1, 1940."

The amendment was adopted after full debate, during which all views on the subject were adequately presented and explained. The purpose of the amendment is simply to afford the state boards of pharmacy, expressing themselves through the National Association of Boards of Pharmacy, opportunity to continue their coöperation toward advancing and maintaining sound professional education in the field of pharmacy.

Under the amendment, no existing reciprocity privileges are in any manner cut down or abridged. All persons who were eligible for reciprocal registration *prior* to the adoption of the amendment will continue to be eligible to the same extent and degree *when the amendment is put into effect*. There has been no change in any manner in the privileges of reciprocity previously enjoyed. However, reciprocal privileges will not be extended to those who graduate from a non-accredited college of pharmacy subsequent to July 1, 1944. Such a position is thoroughly consistent with the long-established policy of the N. A. B. P. of aiding in the advancement and development of pharmaceutical education.

The effective date of the amendment is July 1, 1944, and this affords four full years in which the very few colleges of pharmacy not accredited by the American Council on Pharmaceutical Education may raise their

standards to the approved level. The amendment, once it becomes effective, would affect only those who graduate from non-accredited colleges of pharmacy *after* July 1, 1944. In other words, all the rights and privileges of the students now enrolled, and who become registered on or before July 1, 1944, are fully recognized and protected.

The National Association of Boards of Pharmacy, in recognition of the legal obligation with which the individual boards of pharmacy were faced, originated the proposal upon which the American Council on Pharmaceutical Education was later established. The Council was set up by the AMERICAN PHARMACEUTICAL ASSOCIATION, the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy to devise suitable educational standards to which colleges of pharmacy should conform. The standards finally adopted by the American Council on Pharmaceutical Education represent several years of careful deliberation, during which time the colleges of pharmacy and the boards of pharmacy were kept fully informed with the progress made. The standards themselves were issued in tentative form to every college of pharmacy and board of pharmacy at yearly intervals, with the request that they be gone over carefully, and comment and criticism forwarded to the Council for its consideration and guidance. The standards as finally adopted and approved must therefore be looked upon as the mature consensus of pharmaceutical opinion on the subject of pharmaceutical education.

Real progress in pharmacy can only come from proper educational standards which are conscientiously fostered and maintained. It is most gratifying that the state boards of pharmacy, expressing themselves through the National Association of Boards of Pharmacy, have again shown this fine leadership in the field of pharmaceutical education.

S. H. DRETZKA, *President*
H. C. CHRISTENSEN, *Secretary*
ROBERT L. SWAIN,
Chairman Executive Committee

Time and Duty Analysis of the Retail Pharmacist*

By H. C. Nolan†, C. M. Brown† and Jack Angerman†

For many years industrial engineers have been applying a scientific, objective approach to the work of factory employees with outstanding success, the best known being a time and motion study. The results which have been obtained are known and appreciated by all who are familiar with manufacturing processes. New methods have been developed that have sharply reduced manufacturing costs, altered employee training programs, and at the same time made possible remarkable improvements in the products themselves. But the improvements in the products have not been limited to increased mechanical efficiency. The intensive study of the worker and his machine has made possible the establishment of accurate performance standards. By means of such detailed study of the worker and his job, production experts have been able to determine with considerable precision just what constitutes an "honest day's" work. As a result, production planning and employee training and supervision have been facilitated tremendously and with obvious benefits to all parties concerned, including the worker, the employer and society in general.

* Presented before the Section on Pharmaceutical Economics, A. Ph. A., Richmond meeting, 1940.

† Ohio State University, Columbus.

Despite the progress which was made in manufacturing by an intensive study of the job, the feeling has been general that retailing and the professions are activities which do not lend themselves to the same type of treatment. It has been said that there are too many variables, that the human element is too prominent, and anyway, such a study isn't necessary in this field. However, experience has taught us otherwise. We now find that better methodology can be evolved from an analysis of the work of retail pharmacists, that training can be altered to fit better the problems which these individuals actually face, that performance can be made more effective, and that certain phases of the pharmacist's task can be standardized.

In the hope that a new type of analysis (patterned after the technique of the time and motion study engineer and the industrial job analyst) applied to the work of the retail pharmacist might be conducive of worth-while results, the activities of thirty-one retail pharmacists were checked for a period of one day each. Every job which was performed by these men was timed with a stop watch, the amount of each sale recorded, type of merchandise sold was classified, the attempts to sell other goods noted, in fact, every detail which was thought might be of interest was set down in writing. The result was

Table I.—Average Time Spent and Dollar Sales Volume of 37 Retail Pharmacists in Central Ohio^a

	Average Time per Day De- voted to Activity in Minutes	Per Cent of Total Time Spent	Per Cent of Selling Time	Average Total Sales Volume	Per Cent of Total Sales Volume	Average Amt. of Individual Sale	No. of Sales Attempted per Day	No. of Sales Made per Day	Per Cent of Sales Made per Sales At- tempted
Prescription	23.1	5.6	15.2	\$ 3.06	14.3	\$0.78	4.2	3.9	92.9
Back room	24.4	5.9	16.1	1.48	6.9	0.39	6.1	3.7	60.7
Prop. med.	11.4	2.8	7.5	3.14	14.6	0.41	10.4	7.8	75.0
Pkg. goods	3.4	0.8	2.2	0.46	2.2	0.28	2.3	1.6	69.6
Ther. app.	1.5	0.4	1.0	0.02	0.1	0.14	0.2	0.1	50.0
Rubber goods	0.9	0.2	0.6	0.15	0.7	0.21	0.8	0.7	87.5
Fem. hyg.	2.2	0.5	1.5	0.26	1.2	0.42	0.8	0.6	75.0
Sundries	11.7	2.7	7.7	2.57	12.0	0.38	8.1	6.7	82.7
Cosmetics	5.9	1.4	3.9	0.87	4.1	0.29	4.1	2.8	68.3
Fountain	36.8	8.9	24.3	4.66	21.7	0.18	30.4	27.5	90.5
Stationery	1.4	0.3	0.9	0.20	0.9	0.12	1.7	1.5	88.2
Tobacco	8.5	2.1	5.6	2.26	10.4	0.14	17.0	16.1	94.7
Candy	11.5	2.8	7.6	1.51	7.0	0.10	16.7	14.9	89.2
Newstand	8.9	2.2	5.9	0.84	3.9	0.09	9.5	9.0	94.7
Total selling	151.6	36.6	100.0	21.48	100.0	0.28	112.3	96.9	86.3
Managerial	46.57	11.3	17.8						
Janitorial	39.86	9.6	18.2						
Service	2.27	0.5	0.9						
Stkg., rec. & mkg. mdse.	15.10	3.6	5.8						
Salecsmen	7.24	1.8	2.8						
M.D.	5.41	1.3	2.1						
Miscellaneous	20.27	4.9	7.7						
Sales promotion	21.26	5.1	8.1						
Idle	103.74	25.1	39.6						
Total non-selling	261.72	63.2	100.0						

^a Each man was observed for the entire time he was on duty during one complete day. The figures given include sample for all seven days of the week.

a collection of extremely interesting data which is herein given in the form of a preliminary report. When a more complete analysis of the material has been made, the study will be made available in much greater detail.

Limitations on the Study

The preliminary investigation is based upon only one day's work of thirty-seven retail pharmacists employed in the better type of independent drug stores of central Ohio. The sales volume of the stores studied ranged from \$30,000 annually to \$75,000 annually. The study was made during March and April of this year and no pharmacists employed in chain stores were included. Data is included for all seven days of the week and the results are averages.

In view of the limitations just mentioned, the impression must not be conveyed that the results are necessarily representative of retail pharmacists in general. The data may not vary materially from the results which might have been secured had several sections of the United States been included, but there is no way of knowing this until a study of pharmacists in other areas has been made. No claims are made for this study except that it is believed to be representative of the activities of retail pharmacists employed in the better type of independent drug stores in central Ohio.

Attached Table Gives Results

In column one is a record of the average amount of time devoted to various duties during the period the pharmacist is employed. The time spent on selling various types of merchandise is shown on the upper half of the table while the lower half concerns non-selling duties. The total time spent per day is slightly less than seven hours and only 151.6 minutes of that can be labeled selling time. It is worthy of comment that only 23.1 minutes are spent on dispensing and compounding prescriptions. Columbus is in the center of the country that ranks highest in the number of dispensing physicians. Then, too, this preliminary study was made only on independent neighborhood stores, a fact that must not be overlooked in the interpretation of facts.

One cannot but note the small amount of time devoted to productive effort. In column two, the proportion of the pharmacist's total time devoted to individual activities is shown. Twenty-five per cent of the time is idle and only about 36% is spent in waiting on and selling customers. Less than 5% of the time is devoted to prescriptions whereas 11.3% is spent in managerial duties which includes keeping books, making reports, purchasing and the like. The results of the pharmacists' selling efforts are shown in column four. The average daily sales made during his period of duty totals \$22.36.

The largest single source of sales volume for the pharmacist is the soda fountain with daily sales of \$4.22. The proprietary medicine business is next with \$3.14 in sales and the prescriptions third with

\$3.06. The sales of therapeutic appliances, rubber goods and items of feminine hygiene are negligible.

If the time devoted to selling various groups of merchandise is compared with the sales volume which results (columns three and five), it is seen that proprietary medicines take only 7.5% of the selling time but yields 14.66% of the sales volume.

Sundries show almost identically the same proportion of time and dollar sales. Tobacco, too, is a good revenue producer for the amount of time devoted to its sale, 8.5% of the selling time returns 10% of the sales volume. On the other hand, back room merchandise occupies 16% of the selling time and only 6.9% of the volume. Newstand sales represent an expenditure of 5.9% of the time and 4% of the volume.

The average size of the individual sale within each group is shown in column six. Prescriptions top the list with an average sale of 78 cents. As might be expected, candy and newstand sales were at the bottom of the list with average of 10 and 9 cents, respectively. The average unit sale for all items was 28 cents.

The number of sales attempts, number of sales and the proportion of successful sales is shown in the last three columns. The typical retail pharmacist attempted to make 112.3 sales per day and actually succeeded in making 96.9 or a percentage of 86.5. In other words he was successful in making 86 out of every hundred sales he sought to make. This is a very high proportion of success and is due in large part to the failure to attempt many sales. It was found that neighborhood pharmacists in general engaged in very little suggestive selling. They sell the customer what was asked for but make little effort to sell anything that was not specifically mentioned.

Number of Sales and Time Required

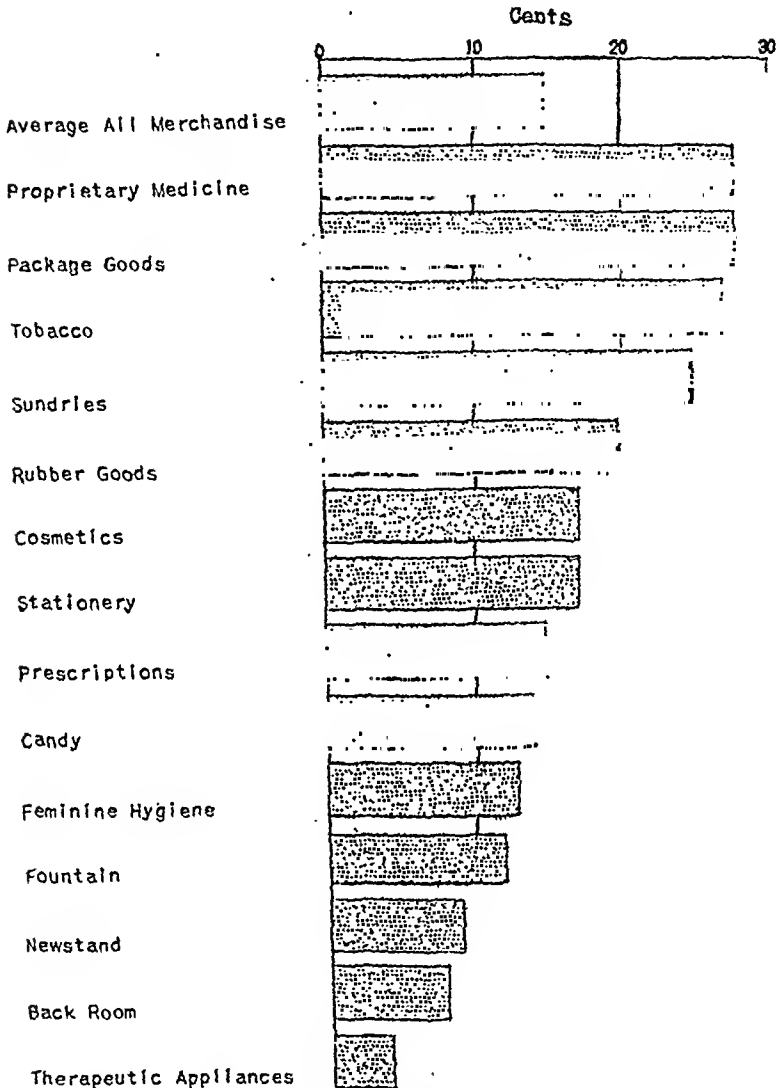
It was found that the pharmacist while on duty filled slightly less than four prescriptions, 3.9 to be exact. This compares with 7.8 items of proprietary medicines. Approximately two-thirds of all sales were made at the fountain, tobacco, candy and newstands.

The chart which is entitled, "Sales Volume by Merchandise Classification per Minute of Sales Effort," shows graphically the average sales volume in cents which was secured by the pharmacist for each minute of effort. It was discovered that an average retail sales volume of 15 cents was secured for each minute of selling effort put forth by the pharmacist.

Variation Among Merchandise Groups

Apparently proprietary medicines and packaged goods were the most productive from a time standpoint. Each minute devoted to selling these products resulted in an average sales volume of 28 cents. Tobacco was but one cent behind at 27. Sundries were also fruitful sources of volume resulting in 25

Fig. 1.—Sales Volume in Cents per Minute of Selling Effort Applied to Various Classes of Merchandise by the Retail Pharmacist.¹



¹ In this preliminary report the term "pharmacist" means the registered pharmacist only. It is the intention of the authors to include all employees of the stores and to study, in the future, the chain and professional stores as well as the independent neighborhood store, which alone is represented in this paper.

cents of volume for each minute of selling effort. Prescriptions were just average with 15 cents for each minute. The group to show the poorest return was therapeutic appliances with a return of but 4 cents per minute. However, this may be partly due to the smallness of the sample in this classification.

It was discovered that the sales of various types of merchandise varied by days of the week. Sunday, for example was a poor day for prescriptions but a very good one for proprietary items and packaged goods. Four times as many items of feminine hygiene were sold on Friday as on any other day of the week except Saturday.

When the study is completed, much more detailed information will be made available.

Tentative Conclusions

First, only about one-third of the registered pharmacist's activities are devoted to selling.

Second, a very small proportion of his time is devoted to prescription work, less than 5%, and his average prescription sales volume is but \$3.65 per day.

Third, the registered men employed in the stores studied did no more than sell their customers what

was requested. Very little attempt was made to promote the sale of any merchandise and very little suggestive selling was practiced.

Fourth, the neighborhood pharmacist has an opportunity to employ much more suggestive merchandising than is done at the present time.

Finally, the cost of selling was based upon time required, varies considerably among groups of

merchandise and therefore, it seems likely that the prices charged for the various types of merchandise should not be marked to yield the average profit of the entire store.

In order to avoid any misinterpretation of results, nothing given in this paper should be so constructed as to indicate pecuniary profits of the proprietors. All results are purely on a time-sales relationship.

The First Connecticut Pharmacy Clinic, April 3, 1940

For several years professionalism in Connecticut Pharmacy has been gathering momentum. A part of the summer and mid-winter conventions have been devoted to professional sessions and at each succeeding session the attendance grew until we were assured that Connecticut pharmacists really were sincerely interested in learning more about the progress of their profession.

This year, President Thomas E. Nugent decided that the Connecticut Pharmaceutical Association was to have an energetic Scientific Committee; one that would function upon the basis of the advancement of professional pharmacy. The personnel of the committee is as follows: John J. Dugan, *Chairman*, who has pioneered in this type of work; Dr. Henry S. Johnson, Nicholas Fenney and Miss Alice-Esther Garvin, of the Connecticut College of Pharmacy; Sister Anna DeSales of St. Raphael's Hospital; Sister M. Concepta of St. Francis Hospital; Charles W. Noyes, Chief Pharmacist of New Haven Hospital and Yale School of Medicine; Joseph J. Jacobs, Edward Benedict, J. Siladi, F. Landy, Michael D'Andrea, Philip Varnum, Paul Kunkel, John H. James and Miss Edna Geseneiser, from busy prescription pharmacies throughout the state; Dr. Hugh P. Beirne, secretary of the Connecticut Board of Pharmacy Commissioners; and Dr. George Bolles, president of the Danbury Dental Association.

The consensus of opinion in the Committee was that interest in professional problems must be stimulated in the pharmaceutical ranks. A program that was wholly professional was planned, which later developed into the Clinic. The purpose was to show pharmacists the means of offering superior service to physicians and their patients. That pharmacists could enjoy and be deeply interested in a day devoted to the explanation of modern information relative to their prescription departments was the idea in the minds of the committee members.

Widespread publicity, arranged by Secretary Garvin of the Connecticut Association, was carried in a series of newspaper articles throughout the state with interesting material relative to the scientific and public health aspects of the Clinic. The Connecticut Board of Pharmacy Commissioners cooperated by sending an official notice and endorsement of the Clinic to each pharmacy. The New Haven Association sent a special notice of their own evaluating the need for this type of work.

The attendance and interest were very encouraging.

The program was arranged by Chairman John Dugan to follow a strict schedule of twenty minutes for each paper, with a ten-minute discussion following; after each two papers, a recess of seven minutes was declared.

The Program

Mr. Nicholas Fenney, instructor at the Connecticut College of Pharmacy, demonstrated the preparation of Cuticolor Lotion and Ointment. He was particularly emphatic in calling attention to the increased action of the lotion due to the adhesive properties in forming a more permanent coating on the skin; and to the cosmetic improvement of the lotion and the ointment which is appealing to the patient.

Later he discussed the new Colloidal Calomel Ointment, which was developed as a result of the research efforts of the members of the A. Ph. A. A very favorable result of clinical study by physicians in testing the therapeutic value of this ointment was cited. The outstanding advantages from the patient's standpoint were the prompt response to treatment and the cleanliness of this preparation. The preparation of Colloidal Calomel was adopted as a feature story later in the leading newspapers of Connecticut.

"Pharmacist, Know Thyself," was the subject of Dr. Frederick D. Lascoff, Associate Professor of Pharmacy at Columbia University, who demonstrated from the economic viewpoint that professionalism in pharmacy is good business. In a later paper, Dr. Lascoff discussed the unlimited possibilities in applying some cosmetic sense to dermatological prescriptions. From a practical point of view, pharmacists must adopt some of the modern ideas that commercial manufacturers have applied to their preparations regarding color, appearance and perfume.

Professor Leslie Ohmart, of the Massachusetts College of Pharmacy, discussed the various preparations of Sulfanilamide available; the pharmacist should maintain an adequate stock of high quality and exercise care in the refilling of these prescriptions, thereby preventing dangerous misuse. He also discussed the two groups of barbiturates, the acids and the salts. Here the pharmacist should be guided

by pharmaceutical ethics, holding the welfare of his customers at heart, and dispense barbiturates in such a manner as to minimize habit forming.

Later, Professor Ohmart presented his paper on "Pharmaceutical Service for the Dentist and His Patient." This field offers great possibilities to the wide-awake pharmacist. The many drugs and preparations the dentist uses in his office may be manufactured by the pharmacist; and, if contacted, the dentist will be persuaded to write prescriptions and his patients will be better served. Copies of dental prescriptions, by the Department of Pharmacy of the Massachusetts College of Pharmacy, developed with the coöperation of members of the staff of the Harvard University Dental School, were distributed.

Dr. Ralph Clark, of the Professional Relations Service, Merck & Co., urged the pharmacists to strengthen their professional contacts by reading the outstanding pharmaceutical and medical publications, then going out and discussing this material with physicians and dentists. Unlimited opportunities await the energetic pharmacist who will spend a definite amount of time in the pursuance of this work.*

Dr. Archie Black, Director of the Squibb Medical Institute, discussed vitamins from the research point of view. Particular emphasis was devoted to Vitamin B and its complex factors. Also, Vitamin K and its blood-clotting action were graphically illustrated by blackboard diagrams and equations.

Professor Maier, of the Connecticut College of Pharmacy, discussed and demonstrated the manufacture of Elixir of Thiamin Chloride, Syrup of Grape and Sugarless Syrup of Orange, emphasizing that a pharmacist could apply his scientific knowledge to the compounding of these preparations.

Dr. Hugh P. Beirne discussed and demonstrated the minimum equipment necessary for a pharmacy to operate efficiently and dispense prescriptions accurately. He called for a clean-up campaign for pharmacy in Connecticut, urging the use of professional windows for attracting the interest of the public; and the putting of the prescription department in order—bringing it out into the open—and then inviting the physicians to visit and actually observe the compounding and dispensing of their prescriptions.

Dr. Barnett Greenhouse, Director of the Diabetic Clinic at Grace Hospital, discussed the various types of insulin now available with the advantages and disadvantages. Dr. Greenhouse and his associates have recently developed a new type of Protamine Insulin, a combination of the Protamine and Crystalline types. Clinical studies have shown that many people who are allergic to regular Protamine Insulin did not receive reactions with this type. The allergic reactions discussed were the hollow spots or sloughing of the skin after the injection of regular Protamine Insulin.

Mr. William English, of the Research Department of Becton, Dickinson & Co., discussed the pharma-

ceutical service to the diabetic, and the types of syringes and needles used in the administration of the various insulins were demonstrated. To maintain this type of service, the pharmacist must understand the technical points. Further emphasis was devoted to the establishment of a diabetic department since survey has shown that many people purchased their regular items in one store but traveled considerable distance for diabetic service to some pharmacy which apparently specialized in this field.

Following each discussion, members of the panel summarized and emphasized important points from the speaker's material. This served as a practical means of showing that these ideas could be adopted by any pharmacy.

The Banquet

The banquet at the Union League Club in the evening brought the day to a fitting close.

Dr. Creighton Barker, executive secretary of the Connecticut Medical Society, spoke on the National Health Program, stating that it would be aided materially by coöperation of physicians and pharmacists. He then extended a very welcome invitation for a committee from the Pharmaceutical Association to meet with the conference group from the Medical Society as a permanent conference committee to study mutual problems and meet the social changes of the day; as well as an invitation to the C. P. A. to exhibit at the Medical Convention May 22nd to 23rd.

Dr. Robert Swain, editor *Drug Topics*, spoke on "The Trend throughout the Country for Closer Association between Pharmacists and Physicians."

Connecticut is well along the right road as evidenced by Dr. Barker's address. Pharmacy is keeping abreast with the latest scientific discoveries; curricula in the pharmacy colleges are being re-adapted to meet the times; and the fact that a knowledge of pharmacy is essential to the medical student is being gradually recognized.

Dr. John Foster, Legislative Chairman of the Connecticut State Medical Society, expressed his pleasure at the happy relationship growing between pharmacy and medicine; and urged that pharmacy and medicine work together for legislation designed to aid both groups, rather than allow such legislation to emanate from legislators not having the true interest of the professions at heart.

Conclusions

1. Pharmacists are definitely interested in the advancement of professional pharmacy.

2. The public is interested. The newspapers ran an unprecedented amount of copy, because of the scientific interest and the approach from a public health angle.

3. The physicians were enthusiastic. The Connecticut Medical Society invited the Connecticut Pharmaceutical Association to establish a permanent

mutual conference committee of physicians and pharmacists.

4. The program has received such favorable comment from the pharmacists that future meetings must be developed from a professional viewpoint in order to keep abreast of modern scientific progress.

5. Enthusiasm for professionalism has been established—evidenced by several of the attending pharmacists who gave talks to local groups urging increase in professional activity.

6. Many pharmacists have improved the appearance of their finished prescriptions by dressing the medicinal article in a more attractive and professional container.

7. Diabetic departments are being established—public health is benefited with more satisfied customers.

8. More professional windows have appeared throughout Connecticut, calling attention to pre-

scription service, hospital supplies, vitamins and diabetic service.

9. Many pharmacists are successfully contacting physicians in order to promote more prescriptions. This is possible because their knowledge has been brought up to date.

10. Cooperation with dentists by contact is being initiated. A relationship similar to that existing between physicians and pharmacists will eventually follow.

11. Pharmacy can be a most fascinating profession, if we will only investigate its possibilities and potentialities.

The Scientific Committee believes that a solid foundation has been built to further continue their work in order that all pharmacists will be justly proud to be members of the profession of pharmacy.

Respectfully submitted,

JOHN J. DUGAN, *Chairman*

EDNA GESENEISER, *Advisory Staff Member*

Drugs, Medicinal Products and Devices

The statement of the Food and Drug Administration for May lists among other regulatory actions the seizures of a number of lots of drug and medicinal products which were found to be in violation of the Food, Drug and Cosmetic Act. These lots included: 1759 bottles of antiseptic solution, the strength of which was found to be below its professed standard; 726 bottles of U. S. P. mineral oil found to be below the U. S. P. standard; 44 packages of laxative powders for babies, which were dangerous to infants when used in the dosage and with the frequency prescribed since they contained over one grain of calomel per powder; 85 packages headache and pain remedy containing acetanilid, a dangerous drug when used in the dosage or with the frequency prescribed; the labeling also failed to bear adequate directions for use and adequate warnings for the protection of users as required by the Act.

Additional drug items seized were: 14 boxes of antiseptic tablets because the labeling bore false and misleading statements and the strength of the article differed from its professed standard; these tablets were also found to be in violation of the Insecticide Act in that the label bore an incorrect statement of ingredients; 9 bottles of a pain and cold remedy, the labeling of which bore false and misleading statements, and the label did not bear the common or usual name of each active ingredient including the quantity of chloroform contained therein. Seventy-seven cartons of gauze bandages were removed from the market because they were found to be unsterile. The remaining seizures included 8808 defective mechanical prophylactics; 42 cartons of poultry remedy, the labeling of which bore false and misleading statements; and 6 magnetic ray instruments because the labeling accompanying them bore false and misleading statements.

Prof. G. L. Curry, dean of the Louisville College of Pharmacy, has donated notes of lectures by William Procter, Jr., under date of October 5, 1859. These were taken by the late Prof. C. Lewis Diehl who was a pupil of Procter's and were given by his daughters to Dean Curry. Professor Curry was associated with the Reporter on the Progress of Pharmacy, A. PH. A., for many years, was a retail pharmacist and has been Dean of Louisville College of Pharmacy for some time. He states that he "presents this link between two illustrious contributors to American Pharmacy—William Procter, Jr., and C. Lewis Diehl—to the AMERICAN INSTITUTE OF PHARMACY as its most fitting custodian."

The British Drug Market.—To an extent the war situation has brought about a shortage of drugs reaching England from Italy, including citrus oils; and important drugs from other countries which are now cut off from commerce. The British pharmaceutical publications are advising the dental, medical and pharmaceutical professions of occurring changes.

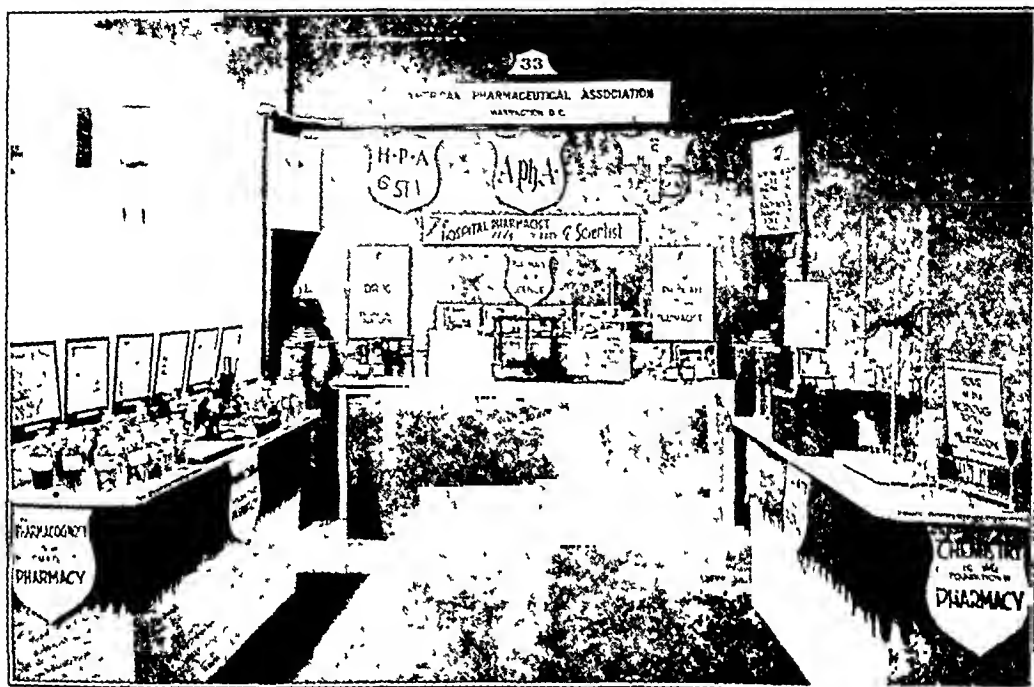
The Second Addendum to the British Pharmacopoeia of 1932

This became official on June 14th and owing to the emergency, the usual three months' notice was not given. The Addendum gives authority for the substitution of certain official drugs and preparations. (Related situations obtain in other European countries.) The situation has partially been met through the pharmaceutical publications and activities of the organizations have been carried on quite satisfactorily, considering the seriousness of the destructive war, the hatred and its consequences. It remains for us to meet the situation and strengthen the ties with those who will cooperate in professional service, disease and health control.

A. Ph. A. Exhibit at Catholic Hospital Association

The AMERICAN PHARMACEUTICAL ASSOCIATION had the assistance of the Catholic Hospital Pharmacists Guild of St. Louis, Mo., and the Hospital Pharmacists Association of Greater St. Louis (special credit is due Mr. A. L. Kroupa, secretary of the latter association), in presenting this exhibit at the Silver Jubilee Convention of the

tubes with stand, burettes and stand, sand and water baths, various sized pipettes with stand. The section on Pharmacognosy included twenty-three crude drugs, glass slides of crude drug sections, compound microscope, several drawings of microscopic sections, also map showing the habitat of the various crude drugs. The section on



Catholic Hospital Association in St. Louis on June 17th. The exhibit received marked attention and many visitors registered at the booth. Each visitor was given informative material about pharmacy.

The section on chemistry included several preparations with the Ph. adjusted, a glass electro potentiometer for Ph. reading, funnel stand, funnels, separatory funnel, test-

Pharmacy included several U. S. P. and N. F. preparations manufactured in the Hospital Pharmacy, analytical balance, spatulas, various sized graduates, show globes, mortars and pestles, and pictures of the Barnes Hospital Pharmacy showing views of the manufacturing parenteral solution, and prescription departments.

Canadian Pharmaceutical Association Convention Cancelled

Because of the present international situation and with the thought that social activities should be curtailed during this time of emergency, the members of the C. Ph. A. Council have decided to cancel the general convention in Vancouver.

It was felt, however, that a business session should be held in some central point. The time and place for this business meeting will be announced later.

J. FRED SCOTT, *President*

The St. Thomas Apothecary Hall at Charlotte Amalie*

By *Conrado F. Astnjo†*

Charlotte Amalie is the only town in the island of St. Thomas and the capital of the United States Virgin Islands.

Charlotte Amalie is now no more what it used to be. Steamships use oil instead of coal, radio has supplanted the cable, and it is not a free port any more. According to many old-timers, it has lost its former glamor as a cosmopolitan center where ships under the flags of all nations used to stop. To-day, on the contrary, only a few ships continue making regular calls there and the town depends principally for its existence on the tourist trade during the winter months.

While visiting the only hospital on the island I asked for information on the medicinal plants most commonly used there. The doctor who was taking me around, a young American from one of the Dakotas, told me that he had no idea about the matter, but that he was sure, however, that the use of medicinal herbs is very widespread, because of the fact that the great majority of the native population is too poor to have their prescriptions filled. He suggested that I see Monsieur Elphege Sebastien, the apothecary in charge of the only pharmacy in town, and who to the best of his knowledge was the man most acquainted with the native medicinal practices.

Monsieur Sebastien's domains are located on Kronprindsens Gade, the main street of the town. The name of the pharmacy is St. Thomas' Apothecary Hall, but is also known as Riise's Apothecary Hall.

Albert Henry Riise, the founder and the first owner of this pharmacy, established his business in 1838. He was an apothecary by profession who had settled in the island with his family. After he died, his two sons, Carl and Valdemar Riise, inherited the business. Valdemar Riise must have been a pharmacist, because after a few years he bought his brother's share, becoming sole owner of the business.

* Presented before the Section on Historical Pharmacy, A. Ph. A., Atlanta meeting, 1939.

† School of Tropical Medicine, San Juan, P. R. Guggenheim Memorial Fellow, University of Wisconsin 1937-1939.

I said that he must have been a pharmacist, because at the time, under the Danish law, only a registered pharmacist could own an apothecary hall. Valdemar Riise remained sole owner of the business for twenty-five years. The 1st of May 1913 the pharmacy was sold to one Olaf Poulsen, a Dane, native of Copenhagen and also an apothecary by profession. Mr. Poulsen kept the name of the store, but seems to have thought of supplanting it by his own sometime in the future, because some of the labels used in the pharmacy during this period bear the old name together with the name of Mr. Poulsen. In 1928 Mr. Poulsen sold the business, still under the original name, to Mr. Isaac Paiewonsky, an American business man. Mr. Poulsen retired then to the town of Volna, Denmark, where he still lives.

Under the American law anybody may own a drug store as long as a registered pharmacist has charge of it. Monsieur Sebastien, an old-timer and a professional pharmacist, having studied in Copenhagen, was put in charge of the store of which he is to-day absolute ruler. The store is situated on the corner of Kronprindsens Gade and NY Gade and bears a very large signreading as follows: "Riise's Apothecary Hall, Founded in

1838." This sign outside the store to which I am referring is very recent, having been put there in 1938.

The original building (illustrated above) was destroyed by fire in 1895 and rebuilt in the same place a year later. The site of the pharmacy has been the same for the last 100 years.

Inside, it has the old type of wooden railing in front of the glass casings and the walls are covered with shelves containing the porcelain jars of the classical pharmacies of old. At each end of the counter two large show globes containing red and green solutions are to be seen. On one of the interior walls appears a Latin inscription, "Nos Remedia Deus Salutem" (We furnish remedies; God, health).

According to Mr. Sebastien, drugs much in use forty years ago were:

- | | |
|--------------------|-------------------|
| 1. Flores Malvae | 7. Herb. Majorana |
| 2. Flores Hyperici | 8. Origani Radix |
| 3. Borago | 9. Angelica Radix |



- | | |
|---------------------|----------------------|
| 4. Herb. Veronicac | 10. Semen Sabadillae |
| 5. Thyme | 11. Semen Quercuo |
| 6. Herb. Millifolii | 12. Castoreum |

Many of the fluidextracts, decoctions and other pharmaceutical preparations used in this store are made from the crude drugs in the laboratory provided with steam heat in the rear thereof.

It is of interest to know that on two occasions other drug stores have been established at St. Thomas, but because of the lack of trade have not lasted long in business.

Besides being the only drug store in town, this pharmacy, like the ones of old, was also a center of education as it was here that the youngsters preparing to take the examinations offered by the local government toward a certificate in pharmacy, received their education and training. Since 1936, however, this practice has been discontinued.

We are greatly indebted to Mr. Elphege Sebastien who graciously supplied us with all the details in regard to the history of the St. Thomas Apothecary Hall. Our thanks also to Professor Edward Kremers of the University of Wisconsin for reading the original manuscript.

Jurisprudence in the Pharmaceutical Curriculum*

By Robert L. Swain†

It seems to me there is no more reason for discussing the place of Pharmaceutical Jurisprudence in the curriculum than there would be for a discussion of any other of its recognized ingredients. Certainly, no one with a valid claim to familiarity with the subject can or would contend against teaching Pharmaceutical Law to those who are going to engage in the practice of pharmacy. To do so would force one to take the illogical position that we are going to train persons for the practice of pharmacy, but at the same time deny them knowledge essential to their own professional and personal security.

Those who might be inclined to feel that teaching Pharmaceutical Law is a luxury, which could well be dispensed with for something of a more substantial character, seem to me to be on the side of those who look upon pharmaceutical education as something to be taught but not used and who regard the pharmacist as a person who, while loaded up with much factual information, does not possess that well-rounded attitude necessary to the proper discharge of professional and civic responsibility. But, for fear that there are those who might, through some strange idiosyncrasy to practical demands, insist that what I am saying is mere assertion, I hope to deal with the subject in such a manner as to convince even them of the soundness of my point of view.

Therefore, let us subject Pharmaceutical Jurisprudence to the same tests which all other subjects in the curriculum should meet in order to justify their inclusion in the course. I should say that Pharmaceutical Jurisprudence and all the rest of the subjects should be sound from the functional, educational and objectivity points of view. Certainly, Pharmaceutical Jurisprudence serves an essential functional purpose. It gives the pharmacist necessary information as to his responsibilities under exacting statutory law, and makes him familiar with the obligations imposed upon him through the common law as well.

Federal and State Health Laws

The mere mention of the Federal Food, Drug and Cosmetic Act, Harrison Narcotic Act, Caustic Poison Act is of itself sufficient to impress one with the necessity of the pharmacist being informed with respect to their requirements. Everyone with any familiarity at all with the field knows that, while the Federal Food, Drug and Cosmetic Act has only an indirect relation to the pharmacist engaged in the operation of a retail drug store within a given area of any given state, also knows that this same pharmacist is held to a strict observance of another federal law; namely, the Harrison Narcotic Act. The mere fact that one act of Congress imposes a heavy burden upon the pharmacist, while another Congressional act is only of incidental importance to him, should, at least, stimulate his curiosity. Not only is it the function of Pharmaceutical Jurisprudence to inform the pharmacist of his relationship to acts of Congress, but it is equally important, if indeed not more so, to have him familiar with the relatively great body of state legislation, which by the very nature of things, he is required to observe. Pharmacy Laws, Narcotic Acts, Poison Laws, State Food and Drugs Acts and all others passed by the state for the regulation of the practice of pharmacy or the drug industry are of direct and immediate importance to the pharmacist.

In addition to his need for being familiar with statutory law, the pharmacist should have his attention directed to the exacting obligations imposed upon him by the common law itself. In fact, so far as his professional reputation is concerned, he may find that the hand placed upon him by the common law bears on him much more heavily than that imposed by the state. Negligence in the filling of prescriptions, the compounding of drugs and medicines, the selling of poisons have been fruitful sources of damage suits, which have not only resulted in financial loss but in the wrecking of professional reputations. The pharmacist who has had his attention focused upon his common law obligations is not only a better pharmacist but he is one who has a keener perception of his social and professional responsibilities.

* Presented before the Section on Education and Legislation, A. PH. A., Atlanta meeting, 1939.

† Editor, *Drug Topics*.

The Educational Value

Pharmaceutical Jurisprudence is also sound educationally. It is impossible, of course, to convey any adequate understanding of either federal or state law without a discussion of their historical background and an explanation of the principles from which they came about. No one can gain a full understanding of the principles of the Federal Food, Drug and Cosmetic Act, as an illustration, unless he has a fair understanding of the fifty-odd years of history from which the legislation emerged. It is not enough to state that the law prohibits interstate commerce in adulterated and misbranded foods and drugs, but the teacher must go back and point out and explain the historical landmarks which mark the development of this branch of federal and state legislation.

Not only is it necessary to do this, but the teacher must also recognize and explain the principles of law which govern any given situation, and a study of this principle of law frequently provokes a discussion of facts of great historic and social significance. The law, let it be remembered, is not an invention but rather a crystallization of what has been learned through experience, and which has been recognized as expressive of rules of conduct which the public has felt to be necessary for the development of and protection of itself. Law is, therefore, a merger of political, social and economic concepts, which cannot be understood or appreciated without some understanding of the various forces upon which they rest. The development of pharmacy as a public health profession has come about, in part, through legislation and law enforcement. Inasmuch as this legislation imposes heavy burdens upon the pharmacist and also prescribes severe penalties for violation of the law, the pharmacist finds it necessary to know what the requirements of the law are in order to discharge his professional obligations to the state, and it is also to his interest to be aware of the penalties so that he might conduct himself so as to avoid them.

The Pharmacist's Civic Responsibility

Pharmaceutical Jurisprudence is also necessary from the standpoint of its objectivity, and in this respect the teaching of Pharmaceutical Law is burdened with the same responsibility which attaches to education as a whole. The study of law teaches exactness and clearness of expression, and that life, liberty and the pursuit of happiness may be threatened by laws loosely drawn and unfairly administered. One of the objects of teaching Pharmaceutical Jurisprudence is not only to make the pharmacist familiar with the legal steps necessary to his own protection, but also necessary to the protection of the public. He should know the purpose and objective of the law surrounding the sale of poisons. He should know the purpose of the law governing

the practice of pharmacy, and this same understanding grasp of the subject should follow through the entire field of Pharmaceutical Law.

It is believed that from a course of Pharmaceutical Jurisprudence, properly conceived and properly given, the student is bound to obtain a sounder sense of his civic responsibility. The careful student will probably appreciate the fact that the common law obligations imposed upon him as a pharmacist do not differ in any basic sense from the common law obligations imposed upon him as a citizen. While the law of torts cuts a big figure in the responsibilities of the pharmacist as a member of the pharmaceutical profession, it cuts an equally big figure in his responsibility as a member of our organized society. It, therefore, appears that, in making the pharmacist mindful of his professional responsibilities, he is at the same time made mindful of his civic responsibility.

Another objective of Pharmaceutical Jurisprudence is to give the student some understanding of the legislative and judicial process. He will, of necessity, be faced with the importance of legislation because a study of legislation constitutes a major portion of the course. This study of legislation as part of the course will direct his attention to its efficacy, and will stimulate him with a desire to learn something of the machinery through which the ideas become law. A study of Pharmaceutical Jurisprudence will also bring him into classroom contacts with opinions of the courts, and he will sometimes be faced with judicial decisions which do not square with his own sense of how the case should have been decided. The nature of this shock is to awaken an interest in the judicial process itself. A reaction normally to be anticipated from such studies is a desire for better pharmaceutical legislation, and for legislation which is so drawn as to conform to what he has learned to be the judicial point of view.

This discussion could be pleasurably extended, but perhaps enough has been said to indicate that the speaker, at least, suffers from no uncertainty in his own mind as to the essential need of including Pharmaceutical Jurisprudence in the pharmaceutical curriculum. It might be surmised, too, that he feels that the time allotted to the course is far too short to develop it properly and to make its value stand out in proper perspective. When properly understood, Pharmaceutical Jurisprudence can well be looked upon both as a general educational or cultural subject as well as an applied subject, using these terms in the strict sense in which they are used in the Pharmaceutical Syllabus. It teaches the student not only to think but also to act, and to do both these things in an intelligent and logical manner. Certainly, from an informed point of view, Pharmaceutical Jurisprudence has a valid place in the curriculum of a modern college of pharmacy.

U. S. P. and N. F. Promotion in West Virginia*

By Charles V. Selby†

The West Virginia State Pharmaceutical Association, through its Committee on Professional Relations, from October 25, 1938, to May 25, 1939, expended the sum of \$1011 in promoting U. S. P. and N. F. Preparations to the medical profession the state of West Virginia.

To clarify and place them in position to handle most any matter of a professional nature the name of this committee was changed from U. S. P. and N. F. Committee to the Professional Relations Committee. This we feel is in keeping with the times and gives us opportunity to use some of the new items accepted by New and Nonofficial medicines.

The West Virginia plan has been worked out in a very simple and home spun manner and possibly the greatest appeal is that of simplicity. The plan we have followed had a purpose and we have followed the method which we thought would accomplish this to the best advantage. After looking over available material we decided on a program of sending out two to four cards, 3" x 5", which will fit the card index box found on most all physicians' desks. Each of these cards dealt with one single item and in most cases could be read in 45 to 60 seconds. These cards were forwarded to the doctors on the 10th and 15th of each month by first-class postage, with a mimeographed letter embracing some subject relative to the practice of medicine and pharmacy. The most famous of these letters, of course, is the one quoted by Dr. Robert L. Swain in his column "Our Pharmacy and Mine" in the July 31st issue of *Drug Topics*. So far as we have been able to ascertain there has been no kick-back from this letter, which handled a very delicate subject. To keep our own members informed a letter was sent them about ten days in advance of each mailing to the doctors.

The most expensive feature of our program is the postage. However, we feel it well worth the cost, for mail first class always gets more attention than a cheaper rate, for the one getting the mail will usually open first-class mail first, to see what is there.

Almost immediately following our first mailing we had letters from doctors all over our state, large and small towns alike, expressing appreciation for the service we had started. The November issue of the *West Virginia Medical Journal* in an editorial commented favorably on our efforts, and asked that their members cooperate to make the program a success. Again in February this publication carried an editorial on this same subject.

With our letter and cards of May 10th we en-

* Read before the Conference of State Committees on U. S. P. and N. F. Promotion, Atlanta meeting, 1939.

† 220 Milford St., Clarksburg, W. Va.

closed a card addressed to this committee, in which we asked the doctors if this program was worth while, and asked for suggestions. Out of approximately 1225 cards we have received over 375 cards, 30.6 per cent favorable; this we think demonstrates considerable interest on the part of the medical profession and warrants a continuation of such a program.

Reports from our state show that where a follow-up by sample, or mere verbal mention was carried out, results have been almost unbelievable. An example is cited in one store which sold to one doctor's office, for office use only, from three to five gallons of Iso-Tonic Dextrose and Sodium Chloride Solution with 1% Ephedrine, as per one of the cards issued by this committee. Some spots about the state report no result and others just fair results; however, on an average results are very good and most pharmacists want us to continue our program as long as we have funds.

It may seem strange, with the average druggist urging that something be done to stop the flow of so many duplicating specialties, that when a movement is started, good money spent in a program to do just the thing they want, the least cooperation comes from those who howl the loudest. How to meet this situation, how to get these men to see the value of this work, and how to get them to take more interest in follow-up work is beyond any effort we have used to date. We hope someone will present something which will help us to remedy this situation.

Another objectionable feature we have found, and how to overcome such, is still another problem, the lack of uniformity in color, odor and possibly taste, of some of these preparations in different stores. It seems the manufacturers have this same problem, for A's Syr. Wild Cherry U. S. P. is slightly darker in color than the one marketed by B; this difference is noted by some doctors and they hesitate sometimes to use these preparations for this reason. Rainfall, sunshine or other natural elements may cause a variation in color from one season to another in some of these preparations, although their therapeutic value is unimpaired.

If we are to succeed in stemming the tide to any degree, we must, once we have started this work, keep continuously at it, find a new way and means of keeping some of the better preparations before the doctor, that he may not have a flash of prescribing U. S. P. and N. F. preparations, and then return to the specialty with a renewed vigor. For us to quit means practically that all that has been done is lost. So the question remains, "How can we year after year put our program in a new dress and sell the same old staple and tried preparations which we know to be good?"

West Virginia has hopes that through this Conference, through the Professional Relations Committee of the A. Ph. A. and the N. A. R. D. Inter-Professional Relations Committee, plans will be de-

veloped, which, added to the products accepted in the yearly supplements of the U. S. P. and N. F. and those of New and Nonofficial Remedies, will enable us to continue this work.

Loyola Student Branch Wins Blue Key

The Branch has recently merited the distinguished honor of being the first campus organization to win the "Blue Key Achievement Trophy" for being the most active organization on the campus during the scholastic year of 1939-1940.

The Loyola chapter of Blue Key, National Honor Fraternity, decided to make such an award annually in order to stimulate extra-curricula on the campus. Although it is the youngest organization on the campus, the A. Ph. A. Student Branch, through cooperation and sincere application of its efforts for pharmaceutical progress, has made itself well deserving of this honor. The high lights of the Student Branch's activities for the past year are:



Left to Right: Rev. P. A. Roy, James J. Brown, Jr., J. F. Thompson and Dean J. F. McCloskey

1. In May, 1939, they sponsored High-School Day in the school of pharmacy, preparing elaborate displays and demonstrations for the prospective pharmacy student to better judge the profession.
2. In June, they drew up plans for a program which would stimulate national interest and increase membership in student branches.
3. In July, they became the first Branch to contribute toward a fund being raised by the Women's Auxiliary of the A. Ph. A. to assist women students through colleges of pharmacy.
4. In August, one of its members organized and served as chairman of the First Annual Meet-

ing of Student Branches, while another served as secretary to the meeting.

5. In October, they sponsored National Pharmacy Week in New Orleans, arranging twenty-five (25) special window displays in stores throughout the city and nine different radio programs over stations WWL, WSMB and WNOE.
6. In December, their membership for the year 1940 was increased from 31 to 54 active members.
7. In March, they presented a half-hour radio play, "The Romance of Digitalis," which was given nation-wide publicity and well received by all of its listeners. This play alone brought much praise to the Loyola Branch.
8. In April, they joined hands with a national movement in petitioning the post-office to design a stamp for pharmacy, having several hundred local citizens to sign the petition. They also conducted a survey of more than 5000 prescriptions in New Orleans drug stores.
9. In May, they climaxed the year's activity with an annual banquet and dance which was attended by more than 200 persons of the pharmaceutical and allied professions.

Besides these special activities, the Branch has held regular monthly meetings which included speakers from ranked members of the pharmaceutical and allied professions, open forums on questions of current interest and demonstrations and papers by student members of the Branch. These meetings were well attended by the lay public as well as those connected with pharmacy.

Concerning the awarding of this trophy to the Loyola A. Ph. A., here are just a few of the many fine remarks which were received:

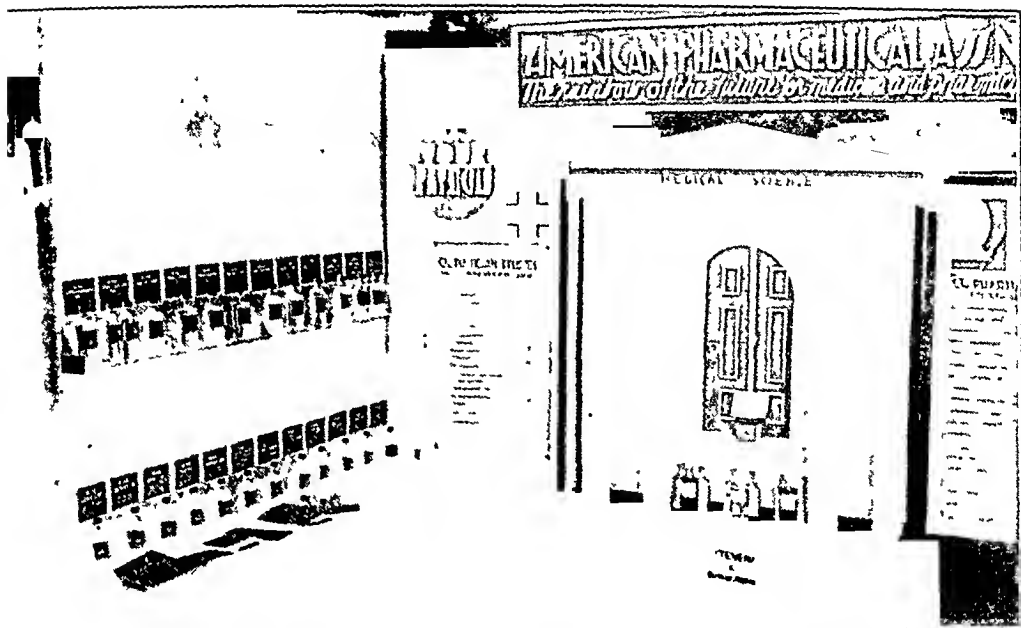
"In making this award to the Student Branch of the A. Ph. A. at Loyola, Blue Key feels that this organization has exemplified the type of extra-curricula activity which reflects most credit upon the university and the members of the organization and is the type of activity more closely associated with the aims, purposes and ideals of Loyola which it has fostered."—JAMES E. BROWN, JR., President, Blue Key National Honor Fraternity.

"I am extremely well pleased to have the college and the Student Branch so recognized by Blue Key."—JOHN I. McCLOSKEY, Dean, School of Pharmacy, Loyola University.

"The students of Loyola have exemplified a leadership in Student Branch activities that merits the best wishes of the entire country, and, being the recipient of this trophy, is indicative of their keen interest in the future of the pharmaceutical profession."—WM. AUGUST WORMER, President, Louisiana State Board Pharmacy.

"We are proud of our Student Branch of the A. Ph. A. and congratulate its members for their endeavor to foster the true ideals and the future welfare of pharmacy, which this Blue Key trophy represents."—VIRY RIV. P. A. ROY, S. J., President, Loyola University, New Orleans, La.

A. P. H. A. Exhibit at the New York Meeting American Medical Association, June 10, 1940



Courtesy of Dean J. H. Kidder

The New York Branch of the Association named the following committee which cooperated splendidly in arranging, installing and overseeing the exhibit: Dean James H. Kidder, College of Pharmacy, Fordham University; Prof. John J. Corcoran, School of Pharmacy, St. John's University; Prof. Frederick D. Lascoff, College of Pharmacy, Columbia University; Prof. Cosmo Ligorio, Brooklyn College of Pharmacy, Long Island University. The members of the senior classes of these institutions assisted the committee.

Approximately sixty preparations were on exhibit and a list of them is available for any who may be interested in a similar exhibit. The preparations were in unsealed containers and every opportunity was afforded for visitors to examine them as well

as typical prescriptions in which these preparations were included.

It was estimated that more than two thousand delegates visited the A. P. H. A. exhibit where copies of a list of the preparations and information about them were distributed. About four hundred physicians registered to receive other information including the Revised Physicians Pocket Manual which was made available by the U. S. P. and N. F. Committee of the N. Y. State Pharmaceutical Association.

The Association later received a letter from Dr. Thomas G. Hull expressing the thanks of the Committee on Scientific Exhibit of the American Medical Association for the exhibit and for the cooperation which it represented.

Donation.—The AMERICAN PHARMACEUTICAL ASSOCIATION is indebted to Stephen L. Nordlinger for a photograph by Gabriel Bensur of the Antique Pharmacy arranged by the Conti Products Corporation at the New York World's Fair, consisting of a balance, furniture, mortars and pestles, drug jars and vases. The photograph has been placed in the Historical file of the A. P. H. A.

Student Membership.—For the second year the members of the graduating class of the New Jersey College of Pharmacy joined the AMERICAN PHARMACEUTICAL ASSOCIATION in a body. The ASSOCIATION is deeply appreciative of the interest and support which this action by the entire class represents.

The Pharmacy Student and Employment, II*

By C. W. Ballard, Ph.D.†

This is a continuation of a project started with the class entering the College of Pharmacy, Columbia University, in 1937 and reported in a contribution presented before this Section at the 1938 meeting under the above title. Undoubtedly the question of how many hours a week the average student may work in the store without endangering his scholastic standing will be with us for a long time and will always be a difficult one to answer. However, if we can arrive at some norm for a particular locality and set of circumstances, it will have some value to the college administrator as a starting point in advising students and employers in regard to student employment. It will reinforce his opinions in dealing with students who are falling behind because of lack of time for study and especially those who are employed by relatives who studied pharmacy in the older or more compact courses.

The paper presented last year dealt with several phases of the employment situation and among these were the tradition that the pharmacy student can rely on his earnings during the term to finance his education; the changes in the educational program which increase the difficulties of this procedure, and, finally, the value of store experience as supplementary education in pharmacy. A limited amount of statistical material was included and this indicated that the college must deal with the individual student in determining the point at which employment interferes with study. The bearing which the student's financial status has upon the employment question and the necessity of conforming to academic opinions if the teaching is to be recognized for non-pharmaceutical objectives, were so briefly mentioned as to warrant amplification.

The majority of pharmacy students are from families in the low or medium income groups and this necessitates their supplementing the family resources through employment. The extent of this employment is dependent upon family financial conditions and how far these can meet living costs and tuition fees. The student who works an excessive number of hours invariably claims that he must do so because of financial stringency and further inquiry as to family circumstances usually substantiates his statement. If we review the tuition fees charged in the several colleges of pharmacy throughout the country, we find two extremes. One of these prevails in the tax-supported institutions where the student's payments represent but a portion of the cost of education, the remainder being derived from governmental sources. The other extreme is found in the colleges which are not subsidized in this manner. The latter colleges may

even find difficulty in covering the cost of education despite the high tuition fees charged. In view of these conditions the student employment situation is much less acute in the tax-supported colleges and does not present the angle of compulsion which it does in the privately controlled institutions.

In certain instances it appears impossible for the student of limited resources to work long hours and carry a heavy study load. Perhaps the most encouraging aspect of this situation is that students are beginning to realize the impossibility. Increasing numbers are reducing their study loads by electing summer study in replacement of that omitted in the regular term. Of course this is only possible where the summer work is the counterpart, qualitatively and quantitatively, of that given in the regular term. Another method of meeting the situation and one voluntarily proposed by a few students, is by distribution of the work of the four years over five years.

I do not believe that the full significance of the extracollegiate study time necessary for recognition of work in the pharmacy school for non-pharmaceutical objectives is realized. Long-established educational procedure dictates that semester hours or credit points are based not only on study in the class room or laboratory but also include the amount of time spent by the student in preparation outside college. Credit for an hour of class work presupposes that at least another hour outside college will be required for preparation. While the prescribed minimum course in pharmacy is one of 3200 hours, this figure does not include the item of extracollegiate study time and therefore is not the total time demand upon the student. This pharmacy program of 3200 hours may and probably will require at least 4800 hours of the student's time and this certainly has a bearing upon employment.

Maximum Hours of Employment

The relation of college credit measurements to clock hours and in turn to time available for employment was discussed in an address before the Conference of Boards and Colleges, District 2, this year (1). For purposes of calculation in this discussion it was assumed that 84 hours weekly might be taken as the maximum time which the student could possibly give to both employment and study. The necessary information as to the actual time spent in college was obtained from the announcements of eight colleges in the district. From the number of class and laboratory hours stated in connection with each course, the amount of extracollegiate study time was calculated on the basis of 1:1 for class hours and 2:1 for laboratory hours. Deducting the total time demands of the programs in each of these eight colleges from the

* Presented before the Section on Education and Legislation, A. Ph. A., Atlanta meeting, 1939.

† Dean, Columbia University College of Pharmacy.

hypothetical maximum of 84 hours weekly, we find that the employment loads should not exceed 30 hours for College *A*, 37 hours for Colleges *B* and *C*, 28 hours for Colleges *D*, *E*, *F* and *H*, and 35 hours for College *G*. It is interesting to note that the general average of employment hours established through these calculations appears to agree substantially with the general averages of our surveys. Of course it is realized that the 84 hours stated as available for work and study is an extreme, but, on the other hand, it appears to be reached or even exceeded in certain instances coming to my attention.

Realizing that accuracy in statistical data demands repeated observations, the survey of the freshman students entering in 1937 was repeated with those entering in 1938. To insure uniformity, the data were secured by the same instructor, Mr. Reinhard Luthin, and the personal opinions as to mental capacity were based upon the student's achievement in the same course, Contemporary Civilization, for which Mr. Luthin is responsible. Contemporary Civilization is a summation course which lays an historical foundation for the understanding of contemporary social, political and economic problems and is a good medium for estimating intellectual capacity and attitudes. While it requires an ability to correlate facts rather than to memorize them, a basis of facts must be established through a reasonable amount of reading. This

reading must be done outside class hours and the time required for this preparation obviously diminishes the amount of time available for employment. The same conditions prevail in many courses of the present pharmacy curriculum and notably in English, foreign language, mathematics and physics. That each requires preparation outside of class is conceded and until we can establish our own data as to the amount, we must accept the opinions of collegiate educators.

Proper Relation of Working Hours to Study Hours

The primary object of these surveys is to establish a norm for the amount of employment which will not seriously interfere with study. It is emphasized that the observations to date indicate that the figure so established cannot be arbitrarily applied to all students. A secondary object, of especial importance in firmly establishing the position of pharmaceutical education in the opinions of non-pharmaceutical educators, is to make available authoritative data on the relation between employment and scholastic achievement among pharmacy students. Possibly the findings will coincide with those resulting from calculations based on the formula employed by the liberal arts colleges in ascertaining the time demands upon the student but if they differ we shall have evidence to support our contentions.

Tabulation of Employment Conditions and Scholastic Standings

Instructor's Rating Class entering 1937	Final General Standing (All Courses)	Number Employed	Employment Hours Weekly		
			Maximum	Minimum	Average
Superior	<i>A</i> = 3 students	2	28	10	19
	<i>B</i> = 5 "	5	47	10	30
Above average	<i>A</i> = 1 "	1	43	..	..
	<i>B</i> = 6 "	6	60	37	45
Average	<i>B</i> = 9 "	8	47	22	37
	<i>C</i> = 7 "	5	50	20	39
Below average	<i>C</i> = 4 "	4	47	32	41
	<i>C</i> = 2 "	2	60	41	50
Poor	<i>F</i> = 5 "	4	60	25	43
Class entering 1938					
Superior	<i>A</i> = 3 "	3	35	32	33
	<i>B</i> = 3 "	1	44	..	..
Above average	<i>B</i> = 2 "	2	21	17	19
	<i>C</i> = 1 "	0	..	..	..
Average	<i>A</i> = 1 "	0	..	..	..
	<i>B</i> = 8 "	7	44	12	29
	<i>C</i> = 7 "	7	60	10	37
Below average	<i>C</i> = 7 "	6	52	33	42

Reference

- (1) C. W. Ballard, "Store Employment during the School Period," Proceedings of the Conference of Boards and Colleges of Pharmacy, District 2, 1939.

State Department Announces Exemptions

The United States Department of State has announced that all U. S. P., N. F. and C. P. chemicals will be exempt from the requirements of the Export Control Act and therefore no licenses will be required.

Torsion Balance Co., New York City, have published Catalog No. 665, displaying Weights: Analytical, Metric, Apothecary, Avoirdupois, Troy, etc. This catalog also contains Weight Tables and Table of Equivalents.

Drugs, Medicines for Red Cross War Relief

War relief activities of the American Red Cross are at present going forward in two widely separated sections of the world: Europe and the Orient. In connection with the Sino-Japanese War the Red Cross earlier this year sent the Chinese Red Cross a shipment of 1,000,000 tablets of quinine sulfate to combat the spread of malaria. All funds contributed for war relief in China are sent to the American Advisory Committee of Shanghai, under the direction of which they are disbursed.

Relief operations incident to the European war are on a larger scale and are being directed on the spot by a number of American Red Cross delegates and representatives. Not only do these representatives direct the distribution of goods, but they keep National Headquarters advised concerning what supplies are needed.

Recent shipments of drugs and medical supplies to European war zones have included the following: epinephrine, procaine, boric acid, tannic acid, camphor, chloroform, cocaine, dextrose, digitalis, ether, glycerine, insulin, iodine, lactose, bichloride of mercury, castor oil, sulfanilamide, sulfapyradin, tetanus antitoxin, zinc oxide, ipecac, metycaine, ephedrine hydrochloride, paraffin, potassium permanganate, sodium bicarbonate and caffeine sodium benzoate.

In addition large quantities of surgical instruments and supplies, foodstuffs, bedding and clothing, have been included in relief shipments.

There are an estimated 8,000,000 Dutch, Belgian and French refugees in southern France, most of them in the unoccupied territory. Red Cross reports indicate that there is serious danger of malnutrition among children unless their needs are quickly and adequately met.

Officials of the pharmaceutical associations of the seven states comprising the Midwestern Conference of Pharmaceutical Associations met in Kansas City Monday, June 24th, to elect officers to serve for a year. H. H. Gibbs of Iowa City, Iowa, was elected president; and Walter H. Varnum of Lawrence, Kansas, secretary-treasurer.

NOTICE

The AMERICAN PHARMACEUTICAL ASSOCIATION will greatly appreciate having any copies of the January 1940, Scientific Edition, which are not needed, returned to the ASSOCIATION at 2215 Constitution Ave., Washington, D. C., as the supply is almost exhausted.

Donation.—Mr. George Judisch of Ames, Iowa, has donated a copy of the second edition of the Prussian Pharmacopœia. Brief historical data are added: "In April 1892 George P. Hancoast presented to our fellow-member, George Judisch, a copy of the second revised edition of the Prussian Pharmacopœia, published in 1833. The editor was Dr. Friedrich P. Dulk, of the Albertus University and Apothecary in Königsberg, Germany. The name and date, Francis C. Grimm, 1834, was signed and a stamp 'F. C. Grimm' is imprinted on the fly-leaf." German Regulations of 1797 provided for a commission to prepare a revision of the German Dispensatory. In 1799 the first edition of the Prussian Pharmacopœia was given publicity; this resembled the Dispensatory. The donation copy referred to was published in 1833 and went through several revisions. The German Pharmacopœia became official in 1872 and the sixth edition in 1926.

We note in *Hospitals* for July 1940 an article by Dr. W. J. Stainsby, of the George F. Geisinger Memorial Hospital, Danville, Pa., entitled, "Economies in the Hospital Pharmacy."

Book Review

Law of Drugs and Druggists, A Treatise with Text, Cases, Statutes, Readings and Digests for Schools of Pharmacy, Retail, Wholesale and Manufacturing Druggists by WILLIAM R. ARTHUR, Professor of Law, University of Colorado. Second Edition. Publishers, West Publishing Co., 1940. About 600 pages. Maroon fabricoid. Price, \$3.00.

The book is designed especially for use as a textbook for schools of pharmacy and a reference book for retail pharmacists, wholesalers and manufacturers. Questions are answered on various phases of narcotic legislation, poisons, patent and proprietary preparations. Laws relating to prescriptions and beverages; the position of a druggist in court, his testimony, damages, duty to customer, etc. The authors discuss federal, state and local laws, price fixing, advertising, postal regulation, distribution of samples, relation of employer and employee.

There is a comprehensive index, cross index; the book has been thoroughly revised, a list of cases fills twelve pages, where possibly a case is inserted to bring out the principles involved; in some presentations the laws of drugs are made which have no direct bearing on the text but do on the law of drugs in states or other connection; more than five pages are given to a glossary. The discussion of Boards of Pharmacy is helpful, that of U. S. Pharmacopœia and National Formulary might have been more extended; these standards have the support of the Government and the Pharmaceutical Conference and that of the AMERICAN PHARMACEUTICAL ASSOCIATION.—E. G. E.

The Association for the Advancement of Professional Pharmacy

About 350 physicians and pharmacists attended the joint meeting of the County Medical Societies of the Metropolitan area and The Association for the Advancement of Professional Pharmacy which was held at the Hotel Pennsylvania, New York, on May 28th.

The speakers were: Dr. Walter P. Anderton, president of the Medical Society of the County of New York, who introduced Dr. Nathan B. Van Etten, president-elect of the American Medical Association; Dr. Robert L. Swain, past-president of the AMERICAN PHARMACEUTICAL ASSOCIATION and Editor of *Drug Topics*; Dr. Evander F. Kelly, secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION and Editor of the Practical Edition of the A. PH. A. JOURNAL; Dr. J. Leon Lascoff, past-president of the A. PH. A.; Dr. Henry Vier, president of the Medical Society of Westchester County; and Dr. Joseph Golomb, president-elect of the Bronx County Medical Society. Thomas A. J. Rocchio, president of the New York State Association, spoke.

The topic of discussion was "The American Health Program," the speakers reviewing what has been done in the past and what can be done in the future by coöperation of medical and pharmaceutical bodies, to bring about a more satisfactory Public Health service for the American people, without the disadvantages of political interference and control.

Professor F. D. Lascoff, newly elected vice-president of the American College of Apothecaries, which was organized at Richmond, Va., during the A. PH. A. Convention, brought the greetings of A. L. Malmo, an A. A. P. P. member, who was elected as the first president of the American College of Apothecaries. Professor Lascoff gave a very vivid description of the New College of Apothecaries and gave a most interesting description of its present set-up on a national scale.

The following members of the A. A. P. P. were presented with an award for distinguished service in The Association for the Advancement of Professional Pharmacy and for their efforts in taking an active part in the organization of the "American College of Apothecaries:" Calvin Berger, N. Y., Fred S. Frankfurter, N. Y., Cyrus Hakes, N. Y., Irving Kantor, N. Y., Albert Klingmann, N. Y., Fred D. Lascoff, N. Y., A. L. Malmo, Minnesota, Jules Mendel, N. Y., John E. O'Brien, Nebraska, and Harry Read, N. Y.

Among the other guests present were: Dr. George D. Beal, past-president of the A. PH. A. and As-

sistant Director of Mellon Institute; Dr. John N. McDonnell, editor of the *American Professional Pharmacist*; and Edgar Bellis, vice-president of the N. A. R. D.

The June meeting was held at the Hotel Empire, on the 26th. This was the annual meeting for the election of officers and conduct of business. Because of the fact that there are many important matters before the Association for promotion and settlement, it was decided that the continuation in office of the present officers was logical and proper.

Therefore the following officers were reelected for the 1940-1941 term: Leonard J. Piccoli, *president*; Frederick D. Lascoff, *first vice-president*, Fred S. Frankfurter, *second vice-president*; Cyrus D. Hakes, *third vice-president*; Albert Klingmann, *treasurer* and Irving Kantor, *secretary*.

The following resolution was unanimously passed by the Association:

WHEREAS, the Conference of Professional Pharmacists of the AMERICAN PHARMACEUTICAL ASSOCIATION, of which Dr. C. B. Jordan was chairman and the Committee on Organization appointed by Dr. Jordan, of which Max N. Lemberger was chairman, have by hard work and unselfish service for the cause of Professional Pharmacy brought their work to a climax in the formation of the American College of Apothecaries, as a National body, and

WHEREAS, this result was accomplished largely through the excellent leadership of the Conference Chairman, Dr. C. B. Jordan, be it

Resolved, that The Association for the Advancement of Professional Pharmacy of New York, congratulate Dr. Jordan and the Committee on Organization on the excellent result of their labors and thank them for their altruistic work in behalf of Professional Pharmacy. The secretary of the A. A. P. P. is directed to spread this Resolution on the minutes of the Association and is directed to send a copy thereof to Dr. Jordan and each member of the Committee on Organization.

Since the organization of the American College of Apothecaries to carry on in a National scope the same type of work done by the A. A. P. P., it was decided at this meeting that henceforth the A. A. P. P. will confine its efforts to a strictly local area in and about New York City.

Donation.—Mr. DeSales Harrison of Atlanta, Ga., has donated a beautiful mortar and pestle to the ASSOCIATION; the gift has been placed in the Museum and thanks are extended.

American Medical Directory, Sixteenth Edition. Cloth binding, price \$18.00. 2683 pages. American Medical Association, 535 N. Dearborn St., Chicago, Ill.

Local and Student Branches

CONNECTICUT COLLEGE OF PHARMACY STUDENT BRANCH.—The meeting held on April 12th was indeed a novel one as a quiz was sponsored by the Branch. Serving as judges were: Dean Johnson and Professors Maier and Barrett. Jack Kraut, president of the Branch, acted as Master of Ceremonies.

The victors of the contest were: Albert Amato, first prize; James P. Hopkins, second; and Seymour Yudkin, third.

Judging from the favorable comments it may be that more of these contests will be run again during the next school year.

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On Friday, May 10th, a meeting was held for the purpose of electing the officers for the school year, 1940-1941: *President*, Charles Blumenthal; *Vice-President*, Myron Levine; *Secretary*, Robert Sandals; *Treasurer*, John White.

The motion was read and approved that the sum of \$15 be allowed to establish a senior graduation prize in the name of the Student Branch. To undertake this President Kraut appointed a committee consisting of himself as chairman, Charles Blumenthal, Robert Sandals and John White.

The motion was also passed that the election of officers always be held on the second Friday in May.

CHARLES BLUMENTHAL, *Secretary*

FERRIS INSTITUTE.—The assembly program of Ferris Institute for April 30th was arranged for and sponsored by the Ferris Institute Student Branch of the A. Ph. A. Mr. Eli Minchhoff acted as general chairman for the program, making the necessary arrangements. The program was a debate, "Resolved That Science Is a Greater Factor in Human Progress Than Is Law." The debate was between Dean Benson, of the Ferris Institute of Pharmacy, and Mr. John E. Dummond, a former city attorney of Big Rapids, Michigan. Mr. W. T. McElwain, Dean of Men at Ferris Institute, introduced the speakers and acted as official timekeeper.

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The May meeting was held at Ferris Institute with Henning Engmark presiding. Minutes of the April meeting were read and approved. Communications from the AMERICAN PHARMACEUTICAL ASSOCIATION were read. A time was set for a business meeting to be held for the purpose of discussing the ways and means of sending a representative to the Annual Meeting of the A. Ph. A.

The guest speaker for the evening was Dr. Rogers, a local dentist, who gave a very informative talk on the proper fitting of teeth, demonstrating with instruments while he pointed out the necessary pre-

cautions which must be taken when fitting teeth. He told us of some of the problems confronted by a dentist. Dr. Rogers stated how "Science has advanced wonderfully in the last ten years, advancing at such a rapid rate that miracles are just a commonplace occurrence," and advocating a closer public relations between professions. Dr. Rogers' chief purpose in speaking was to create an interest in professional brotherhood.

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On May 2nd, a motion was carried at a short business meeting of the Branch, that this Branch send a delegate to the annual meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION, and Secretary Morris E. Fockler was appointed.

MORRIS E. FOCKLER, *Secretary*

LOYOLA UNIVERSITY STUDENT BRANCH.—On April 12th, the Branch held its regular meeting at 7:30 p.m., the president, John F. Thompson, presiding. Members were invited to attend a social to be held after the meeting, the entertainment committee having completed all plans.

Mr. Nicholas Montalbano was appointed to handle the sale of tickets to students for our Annual Banquet and Dance to be held on May 2nd at the new Hotel Bienville.

April 20th was agreed upon as the date for the A. Ph. A. Student Branch picnic. The entertainment committee planned the picnic and details were to be given to the members.

Miss Rosa Mae Poche, chairman of the Committee on Current Affairs, presented a paper which included information concerning research on new products used in the treatment of diabetes. A Junior member, Mr. James Decuers, read a brief history of the United States Pharmacopoeia, and discussed some of the more important monograph revisions in the Second Supplement of the U. S. P. XI.

"The Relationship of the Service Wholesaler to the Independent Retail Pharmacist" was discussed by Mr. I. Lyons, president of I. L. Lyons and Co. He stated that the service wholesalers feel close to the retailers and want to be their friends. He encouraged better relations between the two as they are both so essential in the field of distribution. Following his talk a moving picture on better salesmanship called, "Along Main Street," was shown, through the courtesy of the Coca Cola Company. It stressed several very important points in selling, such as: personal appearance, a pleasant smile and friendliness toward the customers.

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The May meeting was moved up to April 21st, at 5 p.m. in order to enable the students to have an

election of officers who were to be installed on Thursday, May 2nd, at the Annual Banquet and Dance.

John F. Thompson called the meeting to order and the roll was called by the secretary. Election of officers for the new scholastic year then took place, as follows: Urban J. Hecker, *President*; Warren Griffon, *Vice-President*; Miss Peggy Lou Butcher, *Recording Secretary*; Miss Melanie Cassou, *Corresponding Secretary*; and Mr. Louis Koffskey, *Treasurer*.

A discussion of by-laws followed and a motion passed for the appointment of a By-Law Committee consisting of three persons from each class to work with the compilers of the by-laws, after which they are to be submitted to each member of the Branch to be read and criticisms are to be turned in to the appointed committee for further correction, if necessary.

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The Annual Banquet was held at Hotel Bienville on May 2nd at 8:30 P.M. The function was a huge success. Prominent wholesalers and retailers, as well as students, were present. Two hundred and thirty persons attended the banquet and approximately fifty more joined in the dancing.

Dean John F. McCloskey and Dr. Daniel J. Murphy made addresses; John F. Thompson spoke for the Branch; and Nicholas Montalbano acted as toastmaster.

The activity awards were presented to Mr. Leo J. Babin and Miss Rosalie Centanni for the fine work done during the year.

The event was certainly the most important one since our organization began two years ago. The success of the function was due to the cooperation of all members, but principally to the wonderful and untiring efforts of our president, John F. Thompson, and Miss Helen Pitre, the capable chairman of the Entertainment Committee.

JUNE L. WARE, *Secretary*

LOUISVILLE COLLEGE OF PHARMACY STUDENT BRANCH.—The regular meeting was held April 9th. One enjoyable feature was the address of Mr. G. W. Cunningham, District Supervisor of the Bureau of Narcotics, who spoke interestingly and informatively on "The Narcotic Law and Its Enforcement."

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On May 8th the Branch held its final meeting of the year, at which time officers for the ensuing year were elected, as follows: *President*, John J. Furlong; *Vice-President*, Mildred Ann Moore; *Secretary-Treasurer*, Horace L. Alexander, Norton Infirmary, 3rd & Oak Sts., Louisville; *Sergeant-at-Arms*, Charles E. Hamilton.

JOHN J. FURLONG, *Secretary*

MICHIGAN.—The April meeting was held in the Wayne County Medical Society Building, on the 23rd. It was called to order by President Whitney

with 150 present. Minutes of the previous meeting were approved.

R. L. McCabe announced the death of Dr. Bernard Fantus, a friend of pharmacy and of the Michigan Branch, and moved that a suitable resolution be drawn up and sent to the bereaved family. Carried.

Professor Glover of the University of Michigan reminded the members of the Pharmaceutical Conference of the College of Pharmacy, to be held in Ann Arbor, May 21st.

President Whitney then introduced Professor Walter "Pharmaquiz" Chase who proceeded to choose the contestants, two students from each of the Michigan Colleges of Pharmacy. He selected as judges: Mr. Harvey Whitney, University of Michigan; Mr. Ernest Crandall, Wayne University; Mr. Richard Warner, Detroit Institute of Technology; and Mr. Bernard A. Bialk as assistant.

Many interesting pharmaceutical questions were fired at the contestants alternately by the Secretary and the Professor. The contest closed with first prize going to Arthur Koorham, W. U., and second prize to Norene Jadwin, U. of M.; the others followed close behind.

The secretary proceeded to distribute the awards as advertised, "Pot-of-Copper." The amount varied with the scores, the winner of first prize receiving the pot overflowing with shiny, new coppers direct from the U. S. Mint.

Professor Chase then thanked the contestants and the many members who vied for prizes consisting of popular brand cigarettes, and toilet goods manufactured by Parke, Davis & Co. and Penslar Co. He said the success of the program depended entirely upon participants and wanted it understood that it was all in the spirit of good clean fun.

President Whitney then appointed the nominating committee.

Mr. Seltzer read the resolution he had prepared to send to the family of Dr. Fantus. He remarked that it is fine to remember those taken from us by death but nobler and more thoughtful to remember those who have been pillars in the Michigan Branch for many years and have taken residence elsewhere; and moved that the secretary send greetings to Dr. Wilbur L. Seoville, Fred Ingram and Dr. J. L. Powers. Carried.

A rising vote of thanks to Professor "Pharmaquiz" Chase and his assistants who so laboriously provided such an interesting, educational, entertaining and profitable program was moved.

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The May meeting was held in conjunction with the Ninth Annual Pharmaceutical Conference in Ann Arbor, May 21st.

Dr. Howard B. Lewis, chairman of the Conference, opened the session. He introduced Prof. C. C. Glover, who welcomed the pharmacists of the state on behalf of the faculty of the College of Pharmacy, University of Michigan.

Dr. Lewis then introduced Dr. B. V. Christensen, Dean of the College of Pharmacy, Ohio State University, who chose as his topic, "Recruiting for the Profession of Pharmacy." He was followed by Arthur E. F. Crabb of Kalamazoo, who discussed Dr. Christensen's paper in which many points of interest to the future of pharmacy were brought out.

The next speaker was Dr. Arthur Secord, Extension Service and Department of Speech, University of Michigan. He gave a most interesting talk on "Developing an Effective Personality," as follows:

1. General information.
2. Know thyself and overcome lack of confidence.
3. Knowledge of human nature.
4. Knowledge of particular walk of life you are engaged in.
5. Confidence in yourself and your profession.
6. General appearances.
7. Courtesy.
8. Fact.
9. Cheerfulness.
10. Adaptability.
11. Making and holding friends.
12. Appreciation of the duality of service for the good of the community and yourself.

Dr. Secord gave a complete definition of each in a most interesting manner that proved both educational and entertaining.

A general discussion followed, led by Mr. J. H. Webster, who claimed that economic condition is a serious factor in raising the standards of pharmacy.

Mr. R. L. McCabe remarked that pharmacy is in no worse state than any other profession, they all have their problems to-day.

The last speaker of the afternoon was Dr. Arthur C. Curtis, Associate Professor of Medicine, University of Michigan. He spoke on "Sulfapyridine and Anti-Sera in the Treatment of Lobar Pneumonia." He illustrated his talk with charts portraying the effects of sulfapyridine and the two new additions to the sulfanilamide group, namely, sulphothiazol and sulph-meta-thiazol. The use of these drugs has reduced the mortality in lobar pneumonia tremendously. With the introduction of the two new additions which are less toxic and more potent than sulfapyridine even further reduction is looked for.

Dinner was served at the Michigan Union at which President H. A. K. Whitney called to order the meeting of the Michigan Branch. Minutes of the previous meeting were approved, after which new officers were elected. The meeting then adjourned to the Rackham Building where the program was continued.

Dr. Lewis introduced the speaker of the evening, Dr. Bradley M. Patten, professor of Anatomy, University of Michigan Medical School, who presented a most unusual micro-moving picture of "Living Embryos at Various Stages in Their Development." Those who were privileged to see this

marvelous showing have a much better idea of the development of life from the time of conception.

This brought to a close the Ninth Pharmaceutical Conference and most successful year in the history of the Michigan Branch.

BERNARD A. BIALK, *Secretary*

NEW YORK.—The May meeting was held at Columbia University, College of Pharmacy, on May 20th, at 8:30 P.M. About seventy-five members and guests attended. Minutes of the April meeting were approved.

The committee in charge of the exhibit in connection with the convention of the American Medical Association to be held in New York, reported progress.

The report of the Committee on the Progress of Pharmacy was received and ordered attached to the minutes.

Dr. Hugo H. Schaefer, Delegate to the House of Delegates, reported on the A. Ph. A. convention. He commented on the large registration and said that all meetings were well attended. Details will be published in forthcoming issues of the Journals of the ASSOCIATION. The convention in 1941 will be in Detroit.

Mr. Frederick Lascoff announced that Dr. Schaefer had been elected president of the House of Delegates.

There being no further business, the meeting turned to the Scientific Section which was devoted to a discussion of the Food, Drug and Cosmetic Act.

Mr. Charles A. Herrman, Assistant Chief of the Eastern District, Food and Drug Administration, spoke on "The Requirements of the Federal Food, Drug and Cosmetic Act, Affecting Drugs, Devices and Cosmetics."

Dr. Hugo H. Schaefer spoke on "The Drug Regulations of the New York City Board of Health Code."

A rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

PHILADELPHIA.—The final meeting of the season was called to order by Chairman Leberknight at 8:30 P.M., May 21st, at the Philadelphia College of Pharmacy and Science. Minutes of the April meeting were approved.

Dr. James, chairman of the Program Committee, reported that a tentative schedule had been drawn up and that prospective speakers are being contacted.

Dr. Osol, Delegate to the House of Delegates, reviewed the high lights of the Richmond meeting in a very comprehensive manner.

Prof. Leberknight introduced Dr. H. V. Churchill, Research Chemist of the Aluminum Co. of America, who spoke on "Pharmaceutical Applications of Aluminum." He introduced his subject with a brief history of aluminum and then outlined its properties. It is generally attacked by non-oxidizing mineral

acids and alkalis, but is suitable for use with neutral substances, many organic acids and oxidizing mineral acids, such as nitric. Exposed surfaces of metallic aluminum rapidly become oxidized and the metal owes its resistance to this. The stronger the oxidizing action of a substance, the more resistant the aluminum.

The most common pharmaceutical applications are closures, either preformed or "rolled on" caps, and containers such as tubes or individual dose forms in sealed foil envelopes. It is also used in distilled water systems.

A wide variety of substances, including alkaline products may be packaged in aluminum containers, providing they are internally coated with a wax or one of the natural or synthetic resins. Containers are tested for suitability by storing the product in plain aluminum tubes, tubes with different internal coatings, plain tubes adding an "inhibitor" to the product, and glass (control) at 100° F. and observing at one, two, three and six months for any change in the product or container.

Mr. Stroehm, also affiliated with the Aluminum Company, answered many questions during the discussion period.

A rising vote of thanks followed.

RUDOLPH H. BLYTHE, *Secretary*

ST. JOHN'S UNIVERSITY STUDENT BRANCH.—On Tuesday, April 16th, the meeting was called to order by president Rosenstein. Dean Dandreaux spoke to the group, commented on its activity and encouraged the students to continue their work in behalf of American pharmacy. Dr. Dandreaux then introduced the speaker, Dr. Herrick, of Upjohn Co., who gave a very interesting lecture conjointly with films on "Cod Liver Oil" and "Digitalis."

Picturesque and stormy scenes off the coast of Norway very vividly portrayed the fishing for cod during the spawning season. Following the separation of the livers, preparation of the oil and shipment to the United States, the scene is removed to the Upjohn Laboratories at Kalamazoo, Mich., where the preparation of the Cod Liver Oil Concentrate and "Super D Perles" was shown in some detail with the technicalities of manufacture expounded by Dr. Herrick. A very distinct and comprehensive presentation of the official U. S. P. assay for Vitamin A; standardization of digitalis by the official frog method and the non-official Hatcher cat method added completeness to the attention of an engrossed audience.

Following the lecture Dr. Herrick answered questions from the audience. A vote of thanks was accorded the speaker and the Upjohn Co.

On Saturday, April 27th at 10:00 A.M., the members of the Student Branch met at the Administration Building of the Brooklyn Botanical Gardens, from where Dr. Arthur H. Graves guided the group

on a tour of drugs cultivated in the gardens. The selection consisted principally of those whose habitat is native to this area. Though early in the season many of the plants were already in bloom. Dr. Graves very effectively described the morphology and commented on the time, method of collection, properties and medicinal use of the drugs.

A special meeting was called to order on Friday May 10th, at 1:00 P.M.

The secretary presented to the group a paper on "Particle Size Studies" prepared with the assistance of Professor Corcoran. The paper described a method for determining the grain-size distribution of Barium Sulfate U. S. P., using the Andreasen-Berg Pipette. The results obtained by the analysis of two samples were tabulated and in conclusion it was suggested that a test of this type limiting the percentage of large and fine particles would seem superior to the present Pharmacopoeial requirement for bulkiness of powder.

The final meeting of the school year was called to order by the president on May 15th, at 4:00 P.M. President Rosenstein introduced the speaker, Lieutenant Boylan of the New York Police Department. Bureau of Narcotics, who addressed the group on the topic, "Narcotics and Their Relation to Crime."

Lieutenant Boylan spoke on the use of opium, heroin, cocaine and cannabis and pointed out the deleterious effects of the continued use of these drugs. He outlined the method of collection and the preparation of opium for smoking, illustrating his lecture with various contrivances which had been brought for inspection. In the exhibit were many articles which had been seized by the police at the so-called "hop joints" and in the course of their detective work elsewhere. There were a number of gadgets and illustrations, some of which were samples of great ingenuity, of the means taken by the offenders to outwit the police.

Lieutenant Boylan told several interesting experiences which he and his assistants had encountered in their pursuit of these lawbreakers. He also warned pharmacists to keep a watchful eye on the narcotic cabinet since it is the prime object of attack by the unscrupulous peddlers, who because of the Neutrality Act can do little smuggling. In their attempt to quiet the resultant narcotic panic they have resorted to the most vicious means.

In answer to a question from the floor, Lieutenant Boylan pointed out that it costs the government five dollars per day to cure an addict. After the meeting was formally concluded the members were free to examine the exhibit and ask questions of Lieutenant Boylan and his assistant. In the name of the Student Branch the president thanked the officers for their interesting program.

SISTER M. ETHELDREDA, *Secretary*

IN THE NEWS

Illinois State Pharmaceutical Association met in Springfield on May 21st to 23rd. Among those on the program were: Dan Rennick, editorial director, *Drug Topics*, "The Cosmetic Bar;" Samuel Shkolnik, professor of pharmaceutical jurisprudence, Illinois College of Pharmacy, "Black on White Is Not Always Right;" I. H. Bander, McKesson & Robbins, Inc., "What of the Other Twenty-six;" Harry S. Noel, Eli Lilly & Co., "The Bigness of Little Things;" Walter Quinlan, Pro-phy-lactic Brush Co., "Merchandising by the Manufacturer, Wholesaler and Retailer;" Dean Earl R. Serles; Joseph T. Meek, secretary, Illinois Federation of Retail Associations, "Legislation As It Affects the Drugstore;" Leslie O. Heideman, A. C. Nielsen Co., Chicago; Dr. J. S. Templeton, president of the Illinois Medical Society; and Lucien A. File, superintendent of the Department of Registration and Education.

Colorado Pharmaceutical Association met in Denver, June 18th to 20th, the occasion being their fiftieth meeting. As an unusual feature, a special invitation was extended to all the known living men who were engaged in the practice of pharmacy in Colorado at the time the association was organized in 1890. Another group especially urged to attend was the past-presidents and other officers in the association during years gone by. The Fair Trade Law and the Unfair Practices Act came in for their share of attention. Among those on the program were: Arthur Carhart, Colorado Fish and Game Commission; W. H. Cooper, State Supervisor of Trade and Industrial Education, "The George-Deen Act;" James DePree, DePree Chemical Co., "The Opportunity for Summer Vitamin Business;" Al C. Fritz, President of the National Association of Retail Druggists; Fred W. Genz, Philip Morris Co., "The Evaluation of the Cigaret Industry;" Paul G. Stodghill; G. W. Sulley, Merchants Service of the National Cash Register Co., "Better Retail Selling;" Wendell Vincent, Food and Drug Unit in Denver, "New Food, Drug and Cosmetic Law;" Pete Weaver, Secretary of the Oklahoma Pharmaceutical Association; a representative of the Colorado State Board of Health, "The Program for the Eradication of Venereal Diseases;" Rowland K. Goddard, District Chief of the United States Secret Service, "Know Your Money." A "Gay-Nineties" party was held for the express purpose of pleasing the "Old-Timers."

The Indiana State Pharmaceutical Association met in French Lick on June 18th to 20th, for the 59th

time. A varied and interesting program was carried out. Among those on the program were: Dr. G. A. Moulton, Chairman, Executive Committee, N. A. B. P. and Secretary of the New Hampshire Association, "Pharmacy *versus* the People;" Thomas J. Murphy, Jr., Director of Services, Meyer Both Co., Chicago, "A Quick Quiz of Business Conditions Affecting Retail Drug Sales Promotion, Plus a Drug Advertising Clinic;" Joseph C. Schneider, Chief, Bureau of Food and Drugs, Indiana State Board of Health, "New Indiana Food, Drug and Cosmetic Act;" Samuel C. Cleland, Attorney for the Fort Wayne Taxpayers Research Association, "Taxation for Democracy;" Walter Ehrhardt, Meyer Brothers Drug Co., Fort Wayne, "Management of Drug Store Personnel;" John M. Considine, General Sales Manager of United Drug Co., gave one of his merchandising pep talks; F. E. Bibbins, Chief Pharmacist, Eli Lilly & Co., conducted a prescription clinic; Walter Quinlan, Prophylactic Brush Co., presented a talk as a merchandising expert.

South Dakota State Pharmaceutical Association met for the 55th time in Deadwood, June 25th to 27th. The program was distinct, and the many unusual haunts and scenes made the entertainment enjoyable. Among the speakers were: Dr. Neal Bowman, Dean, Department of Commercial Pharmacy, Temple University, Philadelphia, "Life, Liberty and the Pursuit of Laughter;" Dale F. Ruedig, Sales Manager, Western Central Division, Eli Lilly & Co., "Building a Profitable Prescription Business;" John R. Bromell, Curtis Publishing Co., "The Druggist as a Merchant;" R. C. Brewster, Northwestern Sales Division Manager, E. R. Squibb & Sons, "Help Wanted—Salesman;" Eugene J. Robb, Eastman Kodak Co., "Photography for Fun and Profit;" Dr. A. L. Omohundro, McKesson & Robbins, "A General Discussion of the New Federal Food and Drug Law and Its Effects on Consumer Package Labeling;" and J. Leo McMahon, Bruce Publishing Co., "The Consumer Movement."

Mississippi State Pharmaceutical Association met at Edgewater Park on June 17th to 19th. The setting was perfect, the business program worth while, and the entertainment features good. Among those on the program were: J. W. Snowden, Pictorial Paper Package Corporation, "Prescription Promotion;" a representative of the Mississippi Medical Association; the Narcotics Division, Department of Internal Revenue; and Biological Manufacturer, Mayor J. W. Milner of Gulfport made the Address of Welcome and II. II.

Jones the Presidential Address. State officials worked diligently to make this year's convention one of the high lights of the organization's history.

Alabama State Pharmaceutical Association met June 11th to 13th, in Montgomery. Among the speakers were: Representative Earl McGowan, of Chapman, Ala.; Charles H. Evans, President of the AMERICAN PHARMACEUTICAL ASSOCIATION, of Warrenton, Ga.; F. H. High, Presidential Address; F. H. Lowe, Eli Lilly & Co., "The Prescription Department—What It Means to the Retail Drug Store;" Dr. Seale Harris, Alabama Medical Association, "Prescription for Closer Cooperation between Doctors and Druggists;" H. H. Proskey, Lehn & Fink, "Fair Trade and the Manufacturer;" James J. Durr, of Durr Drug Co., "Fair Trade and the Wholesaler;" E. W. Gibbs, Alabama Fair Trade Bureau, "Fair Trade and the Retailer;" Haygood Patterson, "Pure Food and Drug Law;" and W. D. Hearington, Alcohol Tax Unit, U. S. Treasury Department, Atlanta, "The Alcohol Tax Regulations." Of special note was the Prescription Clinic, the Fair Trade Forum and the Legislative Session.

South Carolina State Pharmaceutical Association met June 18th to 20th, in Charleston. The program was outstanding and beneficial. The following spoke: Mayor of Charleston and Dr. W. H. Zeigler, Addresses of Welcome; Charles H. Evans, President of the AMERICAN PHARMACEUTICAL ASSOCIATION, Greetings; George F. Bigby, Presidential Address; H. D. Hearington, Alcohol Division, Atlanta; B. W. Middlebrooks, Narcotic Division, Atlanta; J. D. Ashmore, "Fair Trade;" and W. D. Strother, Columbia, "U. S. P. and N. F."

Tennessee State Pharmaceutical Association met in Nashville June 24th to 27th, with the following on the program: Hon. Thomas L. Cummings, Mayor of Nashville, Welcome; Hon. Prentice Cooper, Governor of Tennessee; James J. Diffie, Presidential Address; Charles E. Wilson, Corinth, Miss., "Professional Pharmacy;" R. R. Ellis, Ellis-Bagwell Drug Co., Memphis, "Wholesaler Cooperation;" Dr. Jere L. Crook, Jackson, "Relations of Medicine and Pharmacy;" Charles H. Evans, President of AMERICAN PHARMACEUTICAL ASSOCIATION, Greetings; R. D. Rainey, Editor of the *Southeastern Drug Journal*.

The Pennsylvania State Pharmaceutical Association met in Pittsburgh June 17th to 20th. Among the speakers were: M. N. Terry, Miller Rubber Co., "Ruhher Goods for Profit;" Lord B. Marshall, Agfa Ansco Co., "Importance of Photography in the Retail Drug Store" and

"How to Increase Sales;" A. J. W. LeBien, Eli Lilly & Co., "Insulin;" I. H. Bander, McKesson & Robbins Co., "Why Be Satisfied with One Out of Twenty-seven;" Theodore Christianson, Public Relation Counsel, N. A. R. D., "National Problems;" John R. Bromell, Curtis Publishing Co., "Merchandise in the Retail Drug Store;" Frank B. Kirby, Abbott Laboratories, "Pollens by the Billions;" W. F. Weher, Burroughs Wellcome & Co., "Fair Trade from the Manufacturer's View;" T. F. Pappe, U. S. Food and Drug Administration, "Federal Food, Drug and Cosmetic Act;" J. J. Donlan, American Weekly and Comic Weekly, "Plus Sales Multiply Profits;" Joseph F. McDonald, Jr., Chief Chemist, Pennsylvania State Board of Pharmacy; Frank Armstrong, Director, Narcotic Control, Pennsylvania Department of Health; Michael V. McFadden, Director, Marihuana Control, Commonwealth of Pennsylvania; F. O. Taylor, Parke, Davis & Co., "Standardization of Medicinal Preparations;" F. R. Sutton, Bauer & Black, Inc., "Displaying and Selling Surgical Supplies;" H. J. Schaeffer, Sharp & Dohme, Inc., "Biological Products;" R. W. Clark, Merck & Co., "Merchandising the Prescription Department;" D. M. Copley, Norwich Pharmacal Co., "Survey of the Vitamins."

California State Pharmaceutical Association met in San Francisco, June 23rd to 26th, for the 34th time. The meeting was one of the most successful and best-attended in recent years. The Open Forum discussion of trade problems proved popular and helpful. Among the subjects discussed were: the question of discounts to doctors; consumer and dealer deals; acceptance of all registered pharmacists; whether store owners or not, as eligible for membership in the association; abuses of the Unfair Practices Act; new Pharmacy Law requirements; and the issuance of free medicines in venereal disease clinics. Among the speakers were: A. C. Fritz, president of the N. A. R. D.; Dr. John N. Wilcox, "A Panel Discussion on Vitamins;" James L. Porter, Presidential Address; E. B. Caldwell, "It's the Plus Sales That Multiply Profits;" Glenn E. Coolidge, "Pharmacists, Cooperation in Venereal Disease Program;" Prof. J. M. Wells, University of California College of Pharmacy, "Application of Buffer Solutions in the Practice of Pharmacy;" Prof. Margaret Airston, "Increasing Importance of the Microscope in Pharmaceutical Analysis;" and Dr. C. D. Leake, "Contributions of Pharmacy to Current Science."

Oregon State Pharmaceutical Association met at Gearhart-by-the-Sea on June 26th to 28th. Among the speakers were: A. C. Fritz, president of the N. A. R. D.; Dr. F. J. Cullen, Proprietary Association, "Federal Food, Drug and Cosmetic Act;" John M. Wilcox, E. R. Squibb & Sons

"Know Your Vitamins and How to Hold This Business;" George D. Prigmore, Pro-phy-lac-tic Brush Co., "Business Cents;" W. H. Whitcomb; Dr. Norman A. David, University of Oregon Medical School, "Pharmacy's Part in U. S. P. Revision Work;" Walter Rhodes, "The Sale of Restricted Drug Items in General Stores;" F. C. Felter, "Value to Pharmacy of the Adoption and Use of a Prescription Pricing Plan;" and W. A. Burdick, Presidential Address. The meeting was most successful.

Idaho State Pharmaceutical Association met on June 10th and 12th, at Sun Valley, for the 34th time. Among those on the program were: A. C. Fritz, president of the N. A. R. D.; B. R. Mull, Eli Lilly & Co.; George D. Prigmore, Pro-phy-lac-tic Brush Co.; Peyton Hawes, McKesson-Blumauer-Frank Drug Co., Portland; C. D. Smith, Smith-Faus Drug Co., Salt Lake; Norman Freeman, McKesson-Ogden; and Pat Brennin, Twin Falls.

Washington State Pharmaceutical Association met on July 14th to 17th, in Tacoma. Among those who addressed the meetings were: G. D. Prigmore, Pro-phy-lac-tic Brush Co., "Business Cents;" J. C. Anderson, McKesson & Robbins, Inc., "More Feet—More Profits;" E. B. Caldwell, *American Weekly*, "It's the Plus Sales that Multiply Profits." The attendance was very good and the meeting a huge success. Through the Tacoma Chamber of Commerce special invitations were issued to doctors, dentists and the general public to attend the Drug Exposition in the lobby of the hotel.

The Louisiana State Pharmaceutical Association met for the 58th time in New Orleans. Guy H. Alford, of Columbia, was chosen as president and P. J. Monte, of New Orleans, as corresponding secretary. The Food and Drug Symposium, conducted by Dr. E. E. Nelson and Dr. E. J. Ireland, assisted by Dean J. F. McCloskey was most interesting. Dr. C. L. Clay, Department of Health, was a featured speaker, discussing the labeling of drugs. Others who spoke were: C. H. Evans, President of the A. Ph. A., Warrenton, Ga.; G. A. Moulton, Peterborough, N. H.; H. vH. Proskey, Lehn & Fink, Inc.; and Harold A. Dempsey, legal counsel for the association.

Visitors.—Among those who visited the AMERICAN INSTITUTE OF PHARMACY during June were the following: M. Landau, New York City; Ramlal B. Bajpai, Washington, D. C.; Amelia DeDominis, Mrs. Emma Lohman, Jane C. Cooper, and B. Olive Cole, Baltimore, Md.; G. H. Trimble, Washington, D. C.; Paul L. Hess,

Kansas City, Mo.; Paul D. Hess, Kansas City, Mo.; Arthur C. Zerler, Sheboygan, Wis.; R. G. Henninger, Riverside, Ill.; Lt. and Mrs. L. Zagelow, Carlisle Barracks, Pa.; D. E. Carmo, Albuquerque, N. M.; W. F. Thom, Hongkong, China; E. C. Schoettle, E. St. Louis, Ill.; Leon Lascoff, New York City; Murray Bree, New York City; Walter M. Chase, Detroit, Mich.; Henry S. Godshall, Lansdowne, Pa.; Stephen L. Nordlinger, New York City; Victor J. Coy, Washington, D. C.; Mr. and Mrs. J. Bennett, Granby, Mo.; Edward Albert, White River Junction, Vt.; Mr. and Mrs. Norman Elsbie, Attleboro, Mass.; Calvin D. Shuman, Philadelphia, Pa.; Mr. and Mrs. B. A. Cran and family, Rochester, N. Y.; K. S. Fu, Hongkong, China; Cathreen Ponnell, Washington, D. C.; Wm. O. Smith, Arlington, Va.; George H. Kimber, Flushing, N. Y.; B. M. G. fine, Arlington, Va.

The Maryland State Pharmaceutical Association met for the 58th time, June 25th to 27th, in Baltimore. Among those on the program were: A. N. Hewing, Presidential Address; R. L. Swain, Editor, *Drug Topics*, "Progress in Inter-Professional Cooperation;" Dr. E. P. Thomas, President, Medical and Chirurgical Faculty of Maryland, "The Physician and the Pharmacist;" F. D. Lascoff, President, New York County Pharmaceutical Society; B. R. Mull, Eli Lilly & Co.; Turner F. Currens, Vice-President, Norwich Pharmaceutical Co.; Walter J. Quinlan, Vice-President, Pro-phy-lac-tic Brush Co.; Dr. H. C. Byrd, President, University of Maryland, "Our University;" Theodore Christianson, Public Relations Counsel for the N. A. R. D., "The Retail Druggist in 1940;" F. W. Irish, Food and Drug Administration, "The Federal Food, Drug and Cosmetic Act;" Dr. George C. Schieks, Assistant Dean, N. J. College of Pharmacy, "The Pharmacist Steps Out for New Business;" Dr. R. W. Clark, Merck & Co., Inc., "The Prescription Department Is Important;" C. G. Frailey, Lecturer, Temple University, "The Food, Drug and Cosmetic Act and the Pharmacist;" C. Jelleff Carr, School of Medicine, University of Maryland, "The Teaching of Prescription Writing in Medical Schools." At the banquet Dr. E. F. Kelly, Secretary, AMERICAN PHARMACEUTICAL ASSOCIATION, acted as Toastmaster; Dr. H. C. Muldoon, Dean, School of Pharmacy, Duquesne University, spoke; G. A. Bunting presented a portrait of Dr. R. L. Swain to the Maryland State Board of Pharmacy; and L. M. Kantner, President of the Maryland Board, accepted Presentation of the National Pharmacy Week Trophy was made to William E. Waples.

The American Pharmaceutical Manufacturers Association met for the thirty-third time in Colorado

Springs, June 9th to 13th. Bordner F. Ascher, of George A. Breon & Co., Kansas City, Mo., was elected President, and S. Barksdale Penick, Jr., was reelected as Secretary. In 1941 the convention will meet in Swampscott, Mass., on June 22nd. Full recognition of the seriousness of the times was evident throughout the meeting.

Massachusetts State Pharmaceutical Association met on June 17th, in Swampscott. The following made addresses: Timothy S. Shea, president of the Board of Registration in Pharmacy; H. C. Newton, Dean of Massachusetts College of Pharmacy; L. C. Parsons, "The Voice of the Apothecary;" Carleton McVarish, "The Yankee Network;" C. H. Clark, "Narcotic Facts;" M. G. Brudno, Presidential; M. M. Goldman, Assistant Attorney General; R. D. Keim, E. R. Squibb & Sons, "What Fair Trade Has Meant to Consumers, Retailers, Wholesalers and Manufacturers;" F. B. Kirby, Director of Education of Abbott Laboratories, "To Breathe or Not to Breathe;" Dr. A. L. Omohundro, McKesson & Robbins, "Label Revision under the Federal Law;" Major A. F. Hogle, Photo Finishing Emergency Council of America; and H. S. Noel, Eli Lilly & Co., "Will It Be Red or Black?"

Virginia State Pharmaceutical Association met in Roanoke, June 24th to 26th, for the 59th time. The following addresses were enjoyed: J. Conrad Kearfott, Presidential; C. A. Mooney, E. R. Squibb & Sons, "Newer Vitamin Developments;" Senator G. E. Heller, Bedford, Va., "The Drug-gist and Politics;" C. L. Guthrie, "Ethics in the Practice of Pharmacy;" Dr. A. G. DuMez, Dean School of Pharmacy, University of Maryland, "Professional Pharmacy." An interesting feature of the meeting was the panel discussion on Fair Trade. Dr. W. G. Crockett presented a paper on "The Trend in Pharmacy;" R. J. Walker on "The Next Step in Pharmacy in Virginia;" J. E. Steger, "Benefits to Be Derived by Coöperating with the Medical Profession;" and G. W. Johnson, "Benefits to Be Derived by Coöperating with the Dental Profession."

Arkansas State Pharmaceutical Association met for the thirty-third time in Hot Springs, June 11th to 13th. On the program were: Joe J. Nelson, from Texarkana; H. V. H. Proskey, of Lohm & Fink; Eli W. Collins, of Little Rock, "Unemployment Compensation;" Elmer Wheeler, Tested Selling Institute, New York City; Hon. Theodore Christianson, Public Relations Council for the N. A. R. D.; and B. E. Newton, U. S. Secret Service. G. M. Marks made the presidential address.

West Virginia Pharmaceutical Association met in White Sulphur Springs, July 1st and 2nd, for

the 37th time. Among the resolutions passed was one commending the Practical Pharmacy Edition of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION. Among those on the program were: Fred A. McFarlin, Presidential Address; Hon. Theodore Christianson, Public Relations Counsel for the N. A. R. D.; R. A. Hardt, E. R. Squibb & Sons, New York City; John R. Bromell, Curtis Publishing Co., Philadelphia; F. W. Irish, Food and Drug Administration, Washington; and Joe Shine, Chicago, Secretary of the Illinois Pharmaceutical Association. Rodney A. Barb, of Parsons, was elected president, and arrangements were made to provide assistance for J. Lester Hayman if he would remain in office as secretary.

Ohio State Pharmaceutical Association met for the 62nd time in Cincinnati, June 17th to 20th. Among those who spoke were: Dr. R. W. Clark, Merck & Co., Rahway, N. J., "New Prescription Business;" Dr. B. V. Christensen, Dean, Ohio State University College of Pharmacy, "Recent Developments in Pharmacy;" Dr. H. C. Nolan, Ohio State University, "Time and Duty Analysis;" Dr. Mothersill, Eli Lilly & Co., "The Importance to the Pharmacist of the New Chemotherapeutic Drugs;" E. P. Gannon, Midwestern Fixtures Corp.; E. B. DeVall and Dr. J. J. Durrett, Food and Drugs Administration.

Maine State Pharmaceutical Association met in York Harbor, for the 73rd time, on June 17th to 19th. Among those who spoke were: Dr. George L. Pratt, president of the Maine Medical Association; Dr. R. L. Mitchell, director of the State Board of Health; Dr. R. L. Swain, editor of *Drug Topics*; Dr. Hugh P. Beirne, secretary of the Connecticut Board of Pharmacy; Dr. Frank Kirby, Abbott Laboratories; Dr. E. F. Cook, chairman of the Revision Committee of the U. S. P.; and E. P. Coffee, chief inspector for the Federal Bureau of Investigation. Drs. E. Fullerton Cook and Robert L. Swain were elected to honorary memberships in the association.

Michigan State Pharmaceutical Association met in Grand Rapids, June 4th to 6th, for its 58th convention. Attendance exceeded that of all previous years. On the program were: Dr. C. K. Valade; Norval B. Fast, Michigan Unemployment Compensation Commission; E. J. Parr, Director of Drugs and Drug Stores for Michigan; Dr. Archie Black, E. R. Squibb & Sons; J. J. Shine, secretary of the Illinois Pharmaceutical Association; J. S. Snowden, Pictorial Paper Package Corporation; John R. Bromell, Curtis Publishing Co.; Paige D. L'Hommedieu, Johnson & Johnson; and Prof. C. H. Stocking. M. N. Henry made the presidential address.

OBITUARY

Denny Brann

Mr. Denny Brann, druggist of Des Moines, Iowa, died June 17th, at Iowa Methodist Hospital. He was a native of Iowa and had been a druggist in Des Moines for more than thirty-nine years. In 1931 Mr. Brann opened a Professional Pharmacy at 720 Locust St., handling only drugs and doctors' supplies.

Mr. Brann was elected vice-president of the N. A. R. D. in 1927; in 1938 to a two-year term on the board of directors of the National Small Business Men's Association, and in 1939 was chosen president of the Iowa Academy of Pharmacy. He was a member of the Chamber of Commerce, the Rotary Club, Retail Merchants Bureau, the Iowa State Pharmaceutical Association and the AMERICAN PHARMACEUTICAL ASSOCIATION.

Within his vocation Mr. Brann had a hobby—the study of serums and anti-toxins. He kept a special mechanical refrigerator for storing these medicines, and could recall a hurried trip through the night with serum which saved the life of a youth in the College Hospital at Ames, Iowa.

Funeral services were held on Wednesday, the Rev. Floyd Allan Bash, pastor of Central Church of Christ, officiating. Burial was in Masonic cemetery.

Besides his widow he is survived by two brothers, Earl C. and Ernest Brann, both of Des Moines.

The same staff of registered pharmacists and store personnel will carry on the business which Mr. Brann began.

Aquilla Jackson

Dr. Aquilla Jackson, Food and Drug Commissioner of Maryland, passed away on July 13th, at the Union Memorial Hospital, Baltimore, following a sudden illness.

Dr. Jackson was born in Baltimore, educated in the public schools and at the City College, and graduated from the University of Maryland School of Pharmacy in 1916. He became a member of the drug firm of Morgan and Millard, Inc., and in 1926 married Miss Bessie Morgan, daughter of one of the founders of the firm. In August 1939 he was appointed to the position which he occupied at the time of his decease. In June of this year he was appointed secretary of the Maryland Board of Pharmacy.

Dr. Jackson was a member of the Maryland Pharmaceutical Association, the AMERICAN PHAR-

MACEUTICAL ASSOCIATION, a past-president of the Baltimore Retail Druggists' Association and of the Alumni Association of the Maryland School of Pharmacy.

He is survived by his widow and three children: Charles Morgan, Lucille and Nancy; also seven brothers. Rev. Richard T. Loring, of St. David Episcopal Church, Roland Park, officiated at the funeral and burial was in Druid Ridge Cemetery.

William E. Luthy

William E. Luthy, one of the best known Cleveland pharmacists, passed away, after a somewhat protracted illness, on June 11, 1940.

Mr. Luthy had given much of his time and effort toward furthering the best interests of professional pharmacy. At the time of his death he was treasurer of the Northern Ohio Druggists Association and an active member of the Northern Ohio Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Possessed of a most engaging personality and high sense of duty, Mr. Luthy's counsel and advice were regularly sought and earnestly considered by his social and business associates. His liberality of disposition and charitable viewpoint as regards the actions of others demonstrated his genuine and sincere love for all people everywhere.

During the last half of his life of sixty-two years Mr. Luthy's professional business had been conducted at the same location around which grew up a host of friends and friendly acquaintances.

The deceased is survived by his wife, two sons and three sisters and a brother.

James W. McCormley

Lieut. James W. McCormley, Medical Administrative Corps, one of the first pharmacists to be commissioned in the army under the 1937 law permitting sixteen pharmacists in the Medical Corps, died at the Walter Reed Hospital recently. He was a member of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Lieutenant McCormley graduated from the College of Pharmacy, Duquesne University at Pittsburgh, in 1933, and received his commission in the regular army in 1938. Last year he graduated from the Army Medical Field Service School, Carlisle Barracks, Pa., and had been stationed at that point.

Practical Pharmacy Edition

Journal of the American Pharmaceutical Association

2215 Constitution Ave., Washington, D. C.

L. F. KELLY, *Editor*

ROBERT P. FISCHER, *Associate Editor*

Vol. 1, No. 8

AUGUST 1940

Consecutive No. 16

—≡≡≡ EDITORIAL ≡≡≡—

—for the Common Defense

"We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquility, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America"—so did the founders of our Republic resolve and so did they execute. We have reached a period in the history of that Republic when it becomes necessary to translate these words—so glibly repeated by every school boy and school girl and so often quoted in patriotic addresses and documents—into action and "action now."

We are presently engaged in preparing "for the common defense" of our general welfare and the blessings of liberty, which we have come to accept as a matter of course. The events of recent months have clearly demonstrated how precious these blessings are and how readily our continued possession of them as free men and women may be challenged.

Regardless of political, economic or social considerations we are confronted with a challenge to the remaining democracies of the world, which goes right to the heart of the things we have held dear and which we have pledged ourselves to defend.

Efficiency demands that in preparing for the common defense each citizen should be assigned to the task at which he is most useful. In a national emergency we look to

the leaders of our Government to give instructions. Fortunately we live in a democracy where each citizen may individually or through his representatives in Congress give expression to such views as he may hold and contribute ideas or other ways and means to the preparation for the common defense. But even in a democracy there comes a time when men and women must obey orders, and as we note the ever increasing extent of the preparations in the current National Defense Program we must realize that the days of stricter regulation of our activities are not far distant. To such regulations as are essential for the common defense no true American will object. But while there is still time, we must help to shape the course of our national and state affairs through intelligent participation in the discussions and actions of the day and particularly by making available to those in charge of the National Defense Program the most effective program for the participation of our profession. *Are we doing this?*

The center of all national defense activity is in our Capital City of Washington. Fortunately for us, that is also the center of organized pharmacy in America. The offices of the AMERICAN PHARMACEUTICAL ASSOCIATION in the headquarters building on Constitution Avenue, in the shadow of the Lincoln Memorial, throb with activity these days as the various departments of the Government call for information and advice covering the whole field of pharmacal participation in defense measures.

These activities are directed toward several definite objectives and, no doubt, will be further extended as the national defense program is developed.

The education and training of a sufficient number of pharmacists to maintain the professional personnel at a level to insure necessary pharmaceutical service for the armed forces and the civilian population, are basically important. In other words, our system of education and registration must be maintained at as near its present level as is possible.

President Roosevelt emphasized the importance of continuing educational programs in a recent statement—urging students “to continue the normal course of their education unless and until they are called” for service to the Nation. He further stated that, “We must also have scientists, engineers, economists and other people with specialized knowledge, to plan and to build for national defense as well as for social and economic progress.”

Evidence has been submitted to those in authority with respect to the needs of schools of pharmacy and the student body that will be required to provide the necessary replacements in the profession.

Several governmental agencies have been authorized to cooperate in developing a scientific roster which will provide information about those with special training and experience in the sciences and professions. Plans are being developed to establish such a list of pharmacists for inclusion in the Scientific Roster in order that those with special qualifications can be promptly located as their services may be required.

Extensive information is being furnished to defense authorities with respect to the normal civilian requirements for drugs and medicines and pharmaceutical services over a period of years with the objective that these requirements may be supplied as fully as possible in case of emergency.

A Drug Resources Committee was organized some months ago with Carson P. Frailey, Secretary of the American Drug Manufacturers Association, acting as chairman, to coordinate the civilian and military requirements of the country in the field of

drug supply. This committee is composed of a representative group of producers and has given consideration to personnel, facilities, stocks on hand or available and possible interruptions to the flow of necessary basic supplies. Special attention has been given to military requirements by this group.

Attention has also been given to the number of pharmacists which may be required for defense purposes and how they may be obtained with the least interruption to civilian service. Basic plans have been worked out and these can be put into operation as the national defense program is developed. These plans cover the commissioned and non-commissioned personnel, the reserves and the enrollment of pharmacy technicians by the American Red Cross. Every effort has been made to so arrange matters that in case of emergency pharmacists will serve in the field for which they have been trained and in which they can render the most effective service. However, many pharmacists who have served in other branches of the armed forces, such as the infantry, air force, artillery, etc., may prefer to continue in these branches rather than to be transferred to pharmaceutical duties.

Throughout the Nation, pharmacists have been anxiously inquiring as to how they might best make their contribution for the common defense. It should be clear from the foregoing summary of activities that effective leadership is being provided in our field and that when the proper time comes each member of the profession will have his opportunity to work in the sphere of usefulness where he can render the greatest possible service to the common cause.

It is the well coordinated effort of all citizens which creates the best defense against aggression and the best offense if such should become necessary.

The AMERICAN PHARMACEUTICAL ASSOCIATION through its Committee on the Status of Pharmacists in the Government Services and through its offices in Washington will continue to keep in close touch with all developments and will endeavor to see that Pharmacy has the opportunity to contribute its part to the national defense in the most effective and efficient manner possible.

THIRTY-TWO THOUSAND

For the past seven months **THIS JOURNAL** has gradually increased its family of readers. This issue will reach at least thirty-two thousand pharmacists—the men and women who make up the backbone of organized pharmacy in America. We can say this with all the dignity and conservatism expected of the Mother of pharmaceutical associations of America and we can say it also with all the exuberance that usually accompanies the successful launching of a new project by the most youthful member of a family.

Each month, since January 1940 has seen the addition to our mailing list of a new group of *dues-paid* members of some State Pharmaceutical Association and our latest count indicates that a total of at least thirty-two thousand *dues-paid* members of state associations throughout the United States will be included in the reader list of this August issue of the Practical Pharmacy Edition of the **JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION**.

However, it is not for the purpose of boasting of our circulation, nor yet to call attention to the service the **AMERICAN PHARMACEUTICAL ASSOCIATION** has set out to render to the practicing pharmacists of America through **THIS JOURNAL**, that these lines are written. Our real purpose is to call to the attention of all who should know the facts, the potentialities for service inherent in this formidable group that constitutes our monthly audience and the manner in which the **AMERICAN PHARMACEUTICAL ASSOCIATION** is now supplementing the services rendered by the respective state pharmaceutical associations in the professional field.

The **AMERICAN PHARMACEUTICAL ASSOCIATION**, in its form of organization, follows the principles of democracy which we are learning to appreciate more fully as each day brings to us the tragic news of curtailment of the personal freedom and the collective liberties of the citizens of foreign nations across the Atlantic. In the House of Delegates of the A. PH. A. are represented the forty-eight state pharmaceutical associations who in turn represent the pharmacists of their respective commonwealths. In the same

House of Delegates there are also represented the national associations of the various branches of the drug trade and of the national teaching and law enforcement bodies. The **AMERICAN PHARMACEUTICAL ASSOCIATION** therefore represents organized pharmacy as a whole and it has dedicated itself to the furtherance of the professional objectives which motivate pharmacists wherever and in whatever capacity they may be engaged in the promotion of the health of the people.

Through **THIS JOURNAL** the organized pharmacists of the nation are being kept informed of the latest developments in the practical phases of their profession. It is their medium for formal expression of views on matters of permanent as well as of passing interest in the field of practical pharmacy. It is, in short, *their journal*. However, **THIS JOURNAL** is not intended to duplicate or replace any other publication.

It shall continue to be our endeavor to represent their views on the problems of the day, their professional ideals and their capabilities to be of service to the allied medical professions, to governmental authorities and to the public.

PROFESSIONAL RELATIONS

For a number of years the A. PH. A., working through its Committee on Professional Relations, has made a study of the methods employed by State and local pharmaceutical associations in developing programs to interest physicians, dentists, veterinarians and other practitioners in prescription writing. The results of these studies will be made available through the columns of **THIS JOURNAL**. For several months a complete program to interest dentists has been published and it is being continued in this issue.

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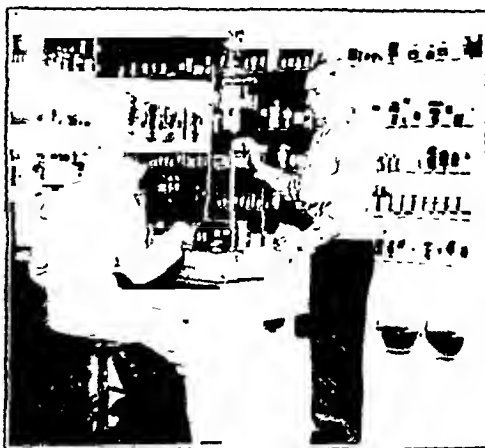
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Training Army Pharmacy Technicians

A discussion of the drug dispensing problem in the Army, in which the course for pharmacy technicians and their duties are outlined. Nearly four hundred pharmacy technicians supervised by the sixteen pharmacists who hold commissioned rank, and medical officers, furnish the pharmaceutical service required at more than 175 station hospitals, dispensaries and general hospitals.



By GLENN K. SMITH

Second Lieutenant, Medical Administrative Corps, U. S. Army,
Chief, Pharmacy Division, Army Medical School, Washington, D. C.

PHARMACY in the army is being practiced by enlisted men of the Medical Department. These men, with few exceptions, have not had any formal training in the duties required of them, although many of them have gained considerable knowledge and skill in the art of compounding by experience and individual initiative. Without doubt, they are to be commended for their ability and resourcefulness; however, few will agree that they should continue to compound and dispense medicinal agents without special instruction in pharmacy.

The question that immediately arises is, "why does the army not have graduate pharmacists; or, since it now has commissioned pharmacists, why are they not doing the dispensing?" From a monetary standpoint alone, this would be impracticable for there are seven army general hospitals and at least one large station hospital employing on the average of five pharmacy technicians per hospital. There are, in addition, 119 station hospitals, 42 station dispensaries and 7 general dispensaries, which require an average of 2 technicians per unit. This gives an approximate total of 376 technicians assigned to duty in military pharmacies. A second

reason for the use of enlisted technicians is that the quantity of work in most of the pharmacies does not warrant the full time services of a commissioned officer. Therefore a course in technical pharmacy for selected enlisted men has been established.

This course of instruction at the Army Medical School for pharmacy technicians was initiated in August 1939, upon approval of the Secretary of War and under the direction of the surgeon general of the army. The course is of nine months' duration and is given to a class of not less than 15 nor more than 25 selected enlisted men of the Medical Department.

Qualifications for Admission

War Department Circular Letter No. 39, Office of the Surgeon General, dated August 14, 1939, specifically states the duration of the course of instruction and the qualifications required of applicants as follows:

1. A Class for the instruction of enlisted men of the Medical Department in pharmacy will be conducted at the Medical Department Professional Service Schools, Army Medical Center, Washington, D. C., September 15, 1939 to June 14, 1940.
2. Applicants for admission to this class will be enlisted men of the Medical Department. Applicants will be high school graduates or have compa-

able practical experience in pharmacy, be of excellent character, in good physical condition and have at least two years and eight months to serve in current enlistment on the date the course begins.

3. Inasmuch as this course will consume one-fourth of the soldier's enlistment period, *only those who show ability to profit by the course, and who may reasonably be expected to continue in the service* should be recommended. Upon completion of the course enlisted students will be returned to the station from which they were sent insofar as practicable.

The objective of the course of instruction is to provide the army with a group of trained men who can be trusted with the routine dispensing of pharmaceutical preparations, yet, at the same time, remain under the supervision of an officer of the Medical Department. A nine months' course is not adequate to completely train enlisted men of the Medical Department for such responsibilities as the operation of hospital pharmacies without such supervision; yet this intensified training should go a long way toward enabling selected men to further improve themselves by continued study. Needless to say, the short course of instruction given at the Army Medical School cannot be expected to accomplish any other purpose.

The initiation of this course for pharmacy technicians was made possible by the enactment of an amendment to the National Defense Act, passed June 24, 1936, which provided for the commissioning of 16 graduate pharmacists. Until this time there was not adequate personnel available to conduct such instruction. During the World War a considerable number of qualified pharmacists were enlisted in the army. Some of these pharmacists continued in the service after the armistice in 1918, but, by normal losses in the twenty odd years that have elapsed, this number has been considerably reduced, thus emphasizing the necessity of such a course of instruction for enlisted men of the Medical Department.

The pharmacy technician has five chief functions: (1) maintenance of necessary stocks of drugs and supplies; (2) manufacture of galenical and stock preparations; (3) routine dispensing and compounding of

medications for wards and clinics of the hospital; (4) compounding of prescriptions for hospital and out-patients; and (5) keeping of adequate records. Yet it is true that the duties of the army pharmacy technician are much more routine and standardized than are those of employees of civilian institutions of the same nature.

Types of Army Drug Stocks

The maintenance of a complete stock of drugs and chemicals in an army hospital involves the requisitioning of two classes of supplies which are referred to as standard and non-standard. All standard items (which are largely United States Pharmacopœia and National Formulary drugs and chemicals) are listed in the Medical Department Supply Catalogue and procured through the local medical supply officer from medical supply depots. Non-standard supplies are those not listed on the supply table and obtained either on emergency or quarterly requisition; their cost being charged against funds allotted to the particular hospital. (This requisition is composed largely of pharmaceuticals of recent development, yet of widespread use.) Such a system of supply naturally operates as a restriction to prevent unnecessary or excessive purchases and to encourage conservative medication.

The manufacture of pharmaceutical preparations in large hospitals requires skill as well as considerable time. Few of the common galenicals are included in the Medical Department Supply Catalogue, it being assumed that they will be manufactured at the local station. Therefore, the preparations manufactured are the non-assayed official galenicals, various stock items, hospital formulas, capsules and powders containing drugs in individual doses.

The routine dispensing and compounding of medications for wards and clinics of the hospital is much the same as in similar civilian institutions with the possible exception that all medicinal substances are furnished upon the written order of a medical officer.

Prescription Compounding

Compounding of prescriptions is handled in a manner similar to the same function in civilian institutions, except that the number of available drugs and chemicals may be considered limited. All prescriptions are written in the metric system and signed by an officer of the medical, dental or veterinary corps. In most station hospitals, where the personnel is not as well trained as in general hospitals, there is and must be less compounding and more routine dispensing of ready-made preparations. This operates as a restriction upon the medical officer and all concerned, and is one of the evils that should be alleviated to some degree by increasing the number of trained technicians.

More Adequate Supervision Required

From the foregoing it may be seen that the duties of the pharmacy technician are no less complex than those of the civilian pharmacist, although he has somewhat less knowledge and responsibility, *but a greater degree of supervision*. However, the extent and quality of this supervision should not be over-emphasized, for the duties of the medical officers in station hospitals are so numerous and varied that they frequently prevent detailed supervision of the pharmacy. The increasing specialization that is now taking place in medicine also operates to render adequate supervision more difficult. Nevertheless, it is a significant fact that all medical officers are deeply interested in the pharmacy with which they must work, both from the standpoint of the available personnel and materials. The educational qualifications of the men sent to the course in pharmacy are considerably above those of the general average of the army. It is also believed that with the increase in the number of commissioned pharmacists the quality of instruction for the army pharmacy technician will improve and be more comparable to the supervision exercised over other technicians of the Medical Department, none of whom are at present operating with as little guidance as are the pharmacy technicians.

The following is a brief outline of the curriculum of the course arranged for pharmacy technicians:

CURRICULUM FOR TECHNICIANS' COURSE

A course in chemistry which includes enough of the principles of general, inorganic and organic chemistry to serve as a basis for the study of chemicals used in medicine and as a basis for the more intelligent study of incompatibilities in prescriptions, along with sufficient elementary titrations to provide an introduction to simple volumetric assays.

A course in pharmaceutical arithmetic which involves only those phases of mathematics which are considered necessary in compounding and dispensing of drugs.

Instruction in materia medica and therapeutics which treats largely of those drugs, chemicals and medicinal combinations prescribed routinely in the Medical Department.

Instruction in pharmacy which includes lecture and recitations as well as laboratory procedures in galenical pharmacy and prescription compounding. It also includes practical experience on the part of the technician in the pharmacy at Walter Reed General Hospital.

Informal discussion in pharmacy administration relative to the equipment, arrangement and operation of the hospital pharmacy under military regulations.

A study is made of the Medical Department Supply Catalogue, including methods of requisitioning supplies and general use of the catalogue. Special attention is given to drugs, chemicals and equipment necessary in the operation of the pharmacy.

Throughout the course of instruction the technician is made to recognize the responsibilities entrusted to him—and is made to realize his own limitations. It is, therefore, emphasized that he must rely upon recognized pharmaceutical references and the close supervision of officers of the Medical Department.

In view of the length of time required for a complete study of the subjects outlined in the course in pharmacy, it may seem that such a training program is too comprehensive to enable the technician to realize much practical benefit in such a short time. However, one should keep in mind that the course stresses fundamental principles and practical application, rather than involved theory and intricate procedures. Only by the continuation of this practical instruction and competent supervision can pharmacy be practiced reliably in the army.

Professional Relations Activity

The Professional Relations Committee of the A. Ph. A. is active again this year and consists of the following; W. Mac Childs, Eldorado, Kans., C. V. Selby, Clarksburg, W. Va.; O. U. Sisson, Chicago, Ill.; R. T. Lakey, Detroit, Mich.; F. D. Lascoff, New York City; W. D. Strother, Columbia, S. Car.; Lowell Ruff, Columbus, O.; Henry H. Gregg, Minneapolis, Minn.; R. A. Kuever, Iowa City, Iowa; S. H. Dretzka, Milwaukee, Wis.; and C. B. Jordan, Lafayette, Ind., Chairman.

First Report—1940

By C. B. Jordan, Chairman

THE chairman has contacted every member of the committee asking for suggestions regarding the program for the coming year. He has also written to each state secretary who failed to answer last year urging that they report professional relations activities carried on by these state associations. We hope to have a report incorporating these replies at an early date.

Good Work in Ohio

Mr. Lowell Ruff, a member of the committee, reported to your chairman under date of April 4th, giving a very fine discussion of what is being done in Ohio toward improving professional relations. This report came too late to be included in last year's work, but I am very happy to report it at this time, as follows:

"I sometimes think we are too quick to criticize or become discouraged over the seemingly small results obtained from professional pharmacists' activities.

"Not until we actually take time to study and tabulate the state-wide and very sincere efforts do we really become enthusiastic. A real pleasant surprise awaits the state chairman who will carefully and consistently compile the publications from all of the counties in his state for three or four years. I refer here to all forms of professional pharmacists' activities from pharmacy educational newspaper copy to the perfected U. S. P. and N. F. prescription cards mailed direct to the professions.

"Here I shall endeavor to briefly outline some of the activities of Ohio's pharmacists:

"1. During the state convention of the Ohio State Medical Association the pharmacists set up an ethical pharmacy display showing new drugs, new pharmacy equipment and fixtures. For the display, emphasis was put upon everything new, modern and up-to-the-minute. For definite reasons the rich history of pharmacy was not mixed in this project. It is my opinion that it is a mistake to do that. We should go completely modern. Leave the

historical exhibit for a separate and entirely different display. Thus we avoid the heterogeneous, hodge-podge found in too many stores to-day. The exhibit was attended constantly by two to four pharmacists on two-hour schedules. They answered hundreds of questions, and served to register more than 600 physicians who showed interest in the affair. The left wing of the display carried a show card giving 'Five Reasons Why You Should Write Prescriptions.' The right wing outlined in three-inch letters 'Four Ways to Prevent Refills.' This was an innovation sponsored jointly by The Ohio State Pharmaceutical Association and The Central Ohio Academy of Pharmacy.

"2. Joint meetings of The Academy of Medicine and the Academy of Pharmacy. Only good can come from such assemblies. If only ten physicians will change their mind, it is well worth time and effort.

"3. Typed prescription cards with suggested seasonable U. S. P. and N. F. prescriptions and descriptive letters mailed direct to all practitioners.

"4. Pharmacists write and publish regularly a series of open letters in The Academy of Medicine Monthly Bulletin.

"5. A series of educational articles appear weekly in large city daily papers under the title 'The Doctor and His Patient.' They have been written along the line, 'See Your Doctor Regularly,' 'Self Medication and Its Dangers.'

"6. Distributed a Dental Formulary to all dentists. A medical formulary was supplied to the special field of poor relief.

"7. Organized The Ohio Hospital Pharmacists' Society to promote hospital pharmacy, and aid hospitals along economic lines. This group meets annually with The Ohio Hospital Association.

"8. Made possible a clinic pharmacy where the service had been lacking due to funds. This has been accomplished by pharmacists giving short periods gratis to fill relief prescriptions.

"9. Several county pharmacists print monthly bulletins and direct mailings to promote interprofessional good-will in a local way.

"10. Ohio State Pharmaceutical Association publishes a most informative bulletin constantly

26433³⁰⁵ Dr. Robert Helig Library
O. H. S. Medical College

keeping its members posted on legislative tax, trade and professional problems affecting pharmacy. Nice features of the bulletins are its perforations for standard 8 1/2 x 11 note-book, the bulletins are consecutively numbered for ready references.

"11. Pharmacists have assembled an extensive exhibit covering the state-wide activities of professional pharmacists. This exhibit is over 28 feet long and 45 inches high. A portion of it was set up at the A. Ph. A. meeting in Atlanta where it was awarded highest honors. The exhibit was returned intact to Ohio and reassembled for the use of all pharmacists. It is for loan to interested groups for meetings and conventions. Its most recent showing was at the American Association for the Advancement of Science meeting.

"12. The five pharmacy colleges usually hold annual meetings for their alumni. These take the form of Open House, One or Two-Day Refresher Courses covering pertinent subjects.

"13. The Ohio State Pharmaceutical Association has initiated a series of sectional meetings. They take the meeting to the pharmacist. They are one-evening meetings co-sponsored with the local group. Pharmacists are aided and advised,

new ideas and trends are discussed. Many pharmacists renew their interest in organization and the build-up for the annual convention is enhanced.

"14. The Annual State Wide Convention now in its 62nd year offers four full days of education, and constructive ideas."

This is splendid work the pharmacists in Ohio are doing and it ought to be an incentive to every state pharmaceutical association to do a similar thing. Your chairman would like to emphasize the opening statement of this report because he believes that failure of state associations to carry on successful professional relations activities is due to discouragement over first attempts. Professional relations cannot be improved on first attempts. A pharmaceutical association that will keep "everlastingly at it" will, I am sure, secure results. I have only to point to the excellent results secured in a number of states where the associations have been "on the job" for some time.

National Dental Program

By G. C. Schicks, Chairman

Attention Pharmacists.—Three more issues and the dental program for the year will be completed. If you have not used the series so far, go back to the January edition and remove the pages in that and subsequent ones so that they may be preserved for future use. They represent valuable information and a valuable set of dental formulas.

Questions Invited.—Questions from pharmacists or dentists concerning any of the formulas published will be promptly answered. Send your problems on dental medication to us. Perhaps we can help you.

Styptics, Astringents and Hemostatics

In therapeutics, iron and iron compounds are used chiefly in the treatment of anemia. However, they are also used in dental therapeutics as astringents and styptics. These latter actions are due to the properties which iron possesses in common with other metallic ions of acting on, or precipitating, pro-

tein material to form insoluble compounds.

The forms of iron which are of principal use in dentistry are those in which iron occurs in the ionic form. Such compounds listed in Accepted Dental Remedies are ferrous sulfate, ferric chloride and ferric subsulfate (Monsel's Solution, N. F.).

In general therapeutics, iron is preferably used in: (1) the form of metallic or elementary iron (reduced iron, U. S. P.); (2) the ferrous or unoxidized form, responding to tests for the ferrous ion (ferrous carbonate in mass and pills of ferrous carbonate and ferrous iodide in syrup of ferrous iodide); (3) the trivalent or oxidized form in the ferric compounds, responding to tests for the ferric ion (ferric chloride in tincture of ferric chloride, U. S. P.) and complex compounds of iron. Complex iron compounds are those compounds of iron whose solutions do not respond to the common tests for ferrous or ferric ions, because the iron is part of a radical; nor do they have the astringent properties of the simple iron solu-

tions. Thus, they are not used as astringents.

Iron salts, and particularly Monsel's Solution, stain teeth. Some of the iron preparations destroy the enamel and cause a pronounced black coloration of the teeth. Reduced and ferrous iron do not color the teeth. Some of the incompatibilities of Monsel's Solution are: tannic acid, hydroxides and sulfides, and, in general, with metal precipitants it forms insoluble compounds.

Tannic acid is used as an astringent and hemostatic. Local applications of a 0.5-1% solution of tannic acid are used as astringents on inflamed mucous membranes, especially in pharyngitis. Solutions of from 2-5% are applied or sprayed on burns. It is a constituent of many mouth washes. Its use in aqueous solution in accelerating the delayed healing of sockets after extraction or surgical operation has been suggested. It is incompatible with alkalis, alkaloids, salts of iron and of most other metals, albumin and gelatin. It reacts with alkaloids and salts of heavy metals to form insoluble compounds.

Iodine compounds are used partly for their local irritant and antiseptic effects, which are probably due to the action of free iodine contained in the preparations or liberated from them, and partly for their systemic actions. Iodine in the form of the tincture is widely used as a skin disinfectant. The action on mucous membranes is more severe than that on the skin and may produce corrosive effects. The presence of potassium iodide in the official tincture and Lugol's Solution delays precipitation and therefore favors penetration. This makes these preparations better for wound disinfection.

Iodine is used in dentistry for its local antiseptic action, also as a disclosing stain, to reveal the presence of so-called mucin plaques.

Preparations in General Use

The following preparations are commonly used by dentists: Ampuls of Iodine, N. F.; Compound Solution of Iodine, U. S. P. (Lugol's Solution); Glycerite of Iodine

and Zinc Iodide, N. F. (Diluted Talbot's Solution); Phenolated Solution of Iodine, N. F. (Boulton's Solution, French Mixture, Carbolyzed Solution of Iodine); Tincture of Iodine, 7%, U. S. P.; Tincture of Iodine 2%, U. S. P. Iodine is considered by many surgeons to be the best disinfectant of the skin, for which purpose the 7% or the 2% tincture is painted over the area to be disinfected. The 7% tincture diluted with an equal part of water is actively antiseptic and when applied to abraded areas is nearly painless.

Borax, sodium borate, is a fair antiseptic with low toxicity. It is used in many proprietary mouth washes and is a constituent of Dobel's Solution, N. F. In saturated solution it is used in cases of stomatitis and thrush. Honey of Rose and Sodium Borate makes a good preparation for this purpose. Borax is decomposed by mineral salts and is incompatible with the metallic salts of the mineral acids and with the salts of most alkaloids.

Prescriptions—Series VII

STYPTICS

(a) ℞	Metric Approx.	Apoth. Equivalents
Liquor Ferri Subsulfatis, N. F.	30.0 cc.	℥ i
Sig: Apply to bleeding part on cotton or gauze. Styptic.		
Note: Common name—Monsel's Solution. Prompt styptic for the control of hemorrhage after the extraction of teeth. Not used internally. Incompatibilities—any compounds containing Tannin or Tannic Acid, Hydroxides and Sulfides.		
(b) ℞	Metric Approx.	Apoth. Equivalents
Acidi Tannici	1.2 Gm.	gr. xviii ss
Aquae Distillatae q. s. ad 60.0 cc.		℥ ii
M. ft. sol.		
Sig: Apply to bleeding part on cotton or gauze. Astringent and styptic. To control hemorrhage. To give relief in burns.		
Note: 0.5-2% used locally. Prescription calls for 2% Tannic Acid, 2-5% used as wet dressing or sprayed on burns. Glycerite of Tannic Acid is more stable		

and is used to make dilutions. It is more pleasant to taste.

The glycerite is 20% strong. To make 2% dilution use as follows:

Glycerite Tannic Acid	6.0 cc.	℥ iss
Distilled water		
<i>q. s. ad</i>	60.0 cc.	℥ ii

Incompatibilities: Salts of iron, alkalis, albumin, gelatin.

DILUTED TALBOT'S SOLUTION

(c) ℞	Metric Approx.	Apoth. Equivalents
Zinc Iodide	4.8 Gm.	gr. lxxivss
Iodine	6.0 Gm.	℥ iss
Glycerin	33.0 cc.	℥ i m. xlviii
Distilled water <i>q. s. ad</i>	60.0 cc.	℥ ii

M.

Sig: Diluted Talbot's Solution.

Note: Antiseptic and astringent for pericementitis, gingivitis, mouth wounds and lacerations.

May be diluted with water to suit varying conditions.

Write for by official title: Glyceritum iodi et Zinci Iodidi, N. F.

(d) ℞	Metric Approx.	Apoth. Equivalents
Sod. Borate	3.0 Gm.	gr. xlviss
Glycerin	1.2 cc.	m. xx
Fldext. Rose	3.0 cc.	m. xlviii
Mel. <i>q. s.</i>	30.0 Gm.	℥ i

M.

Sig: Apply to mouth for stomatitis and thrush.

Note: Write for by official title, Mel Rosae et Sodii Boratis, N. F.

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
August 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

The seventh series of dental prescriptions contains medication for the control of hemorrhage, antiseptic and astringent for pericementitis and treatment for stomatitis, especially in children.

Monsel's Solution, Solution of Subsulfate of Iron, is also available in powder form. The liquid is applied on cotton, but the powder in small quantity is sprinkled on the bleeding surface. Both are efficient for controlling bleeding after extractions.

They act by precipitating the proteins of the blood. Neither the liquid nor the powder is taken internally. Care should be used in keeping them away from the teeth for they will stain.

Tannic Acid in water or dissolved in glycerin is very effective in controlling bleeding. It is also valuable to have in your office or in your home for the treatment of burns. Three grams of Tannic Acid placed in a dry two-ounce bottle will make a 5% solution for burns. Add water to fill the bottle when needed. It should never be kept in solution.

The soothing alkaline properties of borax in Honey of Rose and Borax is a pleasant preparation for stomatitis and thrush. Children do not object to this treatment. For apthae a 10% solution of Zinc Chloride is sometimes applied while the patient is in the dental chair.

For the control of hemorrhage we stock Thromboplastin, Solution of Brain Extract, Epinephrine, Brain Lipoid and many other preparations. Call us in emergency—Humboldt 5670.

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Rules on Thermometers

It has been ruled, by the Federal Food and Drug Administration, that clinical thermometers are devices within the meaning of the Act. Any shipment which is misbranded or adulterated, under the terms of the Act, is subject to seizure. Labels must bear directions for use, advising the user of the time required for accurate reading, under ordinary conditions. Unless actually tested by a recognized laboratory, no clinical thermometer can be advertised as certified. Blanket certification is not permitted—each instrument must be tested separately.

Book Review

The Era Key, U. S. P. XI, and N. F. VI. Revised by LYMAN D. FONDA, Professor of Pharmacy, Brooklyn College of Pharmacy. Price, \$1.00.

A chapter of 40 pages devoted to Nonofficial Remedies concludes the 320 page-size 4" x 6" book, bound in cloth. Published by The Haynes & George Co., Newark, N. J.

The definitions given are brief but explanatory. The first nineteen pages include a "glossary of technical terms." There are four pages of Latin words or phrases and then about six pages devoted to doses; nine pages are given to incompatibilities of *Materia Medica* named and others are given place with descriptions which conclude the book. It is of a convenient size to be carried in the pocket for quick reference.—E. G. E.

Advertising the Professional Pharmacy*

By *Walding G. Rupp†*

It is the purpose of this paper to outline the experience of a professional pharmacy in the advertising field and share this experience with other professional pharmacies. This particular store is centrally located in a city of 300,000 population, and about 200,000 at the beginning of the period mentioned. Before the advent of our advertising venture for a period of five years our prescription business was very nominal and not consistent for the type of store and service which we were rendering. The first year, or year and one-half following, showed a marked increase in business, which could not be attributed to any other cause than the type of newspaper and street-car card advertising which we had instigated. This policy has been followed for twenty-five years with both newspaper and street-car advertising, and for thirty years by newspaper advertising. Car card advertising has been dropped during the past five years.

Our experience has convinced us that the three essential factors in advertising a professional pharmacy are: first, to map out at the very beginning a definite program and follow it continuously; second, to conform in every possible way to your program of advertising; and third, to keep in touch with the advances of medical and pharmaceutical science, both as to material and methods.

It is self-evident that advertising must be such that it will inspire confidence in both the laity and the physician, and one must determine at the outset what his attitude should be toward each. Advertising should be consistent, timely and constructive or educational. In any sale there should be an exchange of equal value on the part of the buyer and the seller. The professional pharmacy is rendering a definite and valuable service to the public and profession and sometimes we have been rather backward in acquainting the doctor and patient with the facts. Our store does not advertise merchandise, medicine or prices. We constantly use the phrase, "see your physician when trouble threatens." The laity appreciates instinctively the sound, common sense expressed, and the physician knows that the pharmacist is taking his calling seriously.

Examples of Advertising

Some "Don'ts" Which Prevent Drownings

An experienced lifeguard offers the following "don'ts" which, if followed, would prevent most of the 7000 drownings which occur every year:

Don't swim far from shore unless accompanied by a boat.

Don't swim until two hours after eating, nor stay in swimming until you are very cold.

Don't plunge into cold water when exhausted or overheated.

Don't try to rescue another person by plunging in yourself unless you have had life saving training.

Don't fight against a current if caught in it, but swim diagonally across with its flow.

Don't dive into water without knowing its depth or what lies under its surface.

Prevention is better than cure—and better than drowning.

After Middle Age, Watch Digestion

It is well known that persons past middle age who have only recently begun to have abdominal distress, are probably suffering with organic disease.

A physician says, "Particularly alarming is the indigestion that comes suddenly to the older person who has always boasted of a 'cast iron stomach.' Obviously something has gone wrong; perhaps a tumor has begun to grow, or a gallstone or the heart has begun to fail."

He advises that "every person past middle age who, after years of good health, begins to suffer with indigestion or abdominal pain should hasten to have a careful examination, including an X-ray study of stomach and bowel."

Consult your physician promptly whenever problems requiring skilled medical attention arise. Bring us your prescriptions.

Remember This

If it is important to have your prescriptions filled exactly as your physician orders, it is important that you choose a pharmacist with a reputation for accuracy and high standards in pharmaceutical work.

Whenever you have a prescription to be filled, it is well to remember that this professional pharmacy, where carefully trained experts devote their undivided efforts to such work, is best qualified to serve you. Try us next time.

Occasionally copies of similar ads are mailed to physicians. This notation appears at the top, "This advertisement is now running in Toledo Street Cars," and at the bottom, "We are doing our part to educate the public against the use of patents and the value of preventive medicine. Are you reciprocating?"

Program of Advertising

The advertising should be planned for a long period of time—it must be persistently followed. A campaign lasting for three months and then dropped would be of little permanent value. It may be months or years before serious illness strikes an individual or family and, if your advertising has been constant, your store will be the first one thought of if a prescription is to be filled. A professional pharmacy needs new prescriptions and new patrons as well as old prescriptions and old patrons.

The appearance of your store must be such that it will carry through the message of your advertising. Fixtures should be conservative, as what may be in vogue to-day may be out of date in ten years; for example, the colonial style of architecture has been in for over two hundred years—contrast this with some of the monstrosities of the nineties. The attitude of the proprietor and his clerks should be that of professional men, serving the best interest of the customer. Counter prescribing is, of course, reprehensible. One cannot be professional and still be commercial—advertise one thing and practice another. The confidence of the public is

* Presented before the Conference of Professional Pharmacists, A. Ph. A., Atlanta meeting, 1939.

† 1955 Crosswell Place, Toledo, O.

gained through commercial methods; they may buy certain items at chain stores on account of price, but when a prescription is to be filled they expect the best material, skill and knowledge, and deal elsewhere. It is gratifying to hear someone remark, "This is a real drug store, you don't handle lunches, cameras and washing machines."

The personnel must be carefully selected and it may take years to build up the proper organization. One should be continually on the lookout for competent help and sometimes it is well to engage someone who might not be needed at the time. One must carry a large enough force to carry the peak of business. Vacation periods, absence or illness afford an opportunity to make room for a desirable prospect.

Keep continually in touch with the advances in medical and pharmaceutical science, both as to material and methods:

A. Through medical and pharmaceutical press and books, new developments and trends can be made known to the medical profession. A good example of this would be syrup or elixir of Mandelic Acid. As soon as this appears in medical and pharmaceutical literature a letter to the physician, giving information and references, and advising that you are prepared to fill prescriptions for the product, is a good medium of advertising. Blotters and pamphlets, describing your own special preparations, afford valuable contact with the doctor. Information about pharmacopœia and N. F. changes are very helpful to physicians.

B. Through contact with manufacturers: A file of literature on specialties, ampuls and biologicals should be kept on hand so that information can be given very quickly. Literature on newer products can be enclosed with billing or statements.

Our store is in a slightly different position than other ethical stores as we carry a complete line of surgical and sickroom supplies, also laboratory and scientific apparatus, and maintain optical and truss departments. However, the essential factors in advertising the professional pharmacy remain the same in any type of ethical store. The program should be definitely planned, followed continuously and should be followed up in every way by the policy of the store in its attitude toward the physician and the laity.

We have tomorrow
Bright before us
Like a flame

Yesterday
A night-gone thing
A sun-down name

And dawn—today
Broad arch above the road we came
We march.

—Langston Hughes

AROUND THE STATES

In California

Pharmacists are cooperating "almost 100%" with the Department of Public Health in the campaign to stamp out venereal disease, according to a representative of the department who is calling on pharmacists to acquaint them with the state law prohibiting treatment of venereal disease by anyone but a physician.

The California Pharmaceutical Association has issued a schedule of hypnotic drugs and specialties which may be supplied only on prescription. Each product is marked to indicate which prescriptions may or may not be refilled.

In Louisiana

The Second Southern Institute for Hospital Administrators to be held at New Orleans, October 21st, through November 1, 1940, will include a demonstration of Hospital Pharmacy at various New Orleans Hospitals.

In New Jersey

Governor A. Harry Moore has appointed a Health and Welfare Council to prepare a tentative draft of a program for the purpose of contributing to general health problems of the state and to prepare a tentative draft of a program to be followed by the Council in promoting health and welfare procedures which are or may become necessary as a part of New Jersey's military defense program. Dr. Robert P. Fischelis, Secretary of the Board of Pharmacy and member of the State Board of Health, represents pharmacy on the Council.

In New York

The N. A. R. D. Convention Committee, headed by Robert R. Gerstner, is making every effort to entertain the large attendance expected at the meeting of the N. A. R. D., September 23rd to 27th, inclusive, with headquarters at the Hotel Pennsylvania. A World's Fair Day, dedicated to pharmacy has been arranged for September 27th; and a concert of the New York Philharmonic Orchestra, with Helen Jepson, soprano of the Metropolitan Opera Company, Richard Crooks, a tenor of international renown, and Albert Spalding, celebrated violinist, at Carnegie Hall for the evening of September 25th.

In Ohio

The Northern Ohio Druggists' Association voted to appropriate \$3000 from the building fund to enable the School of Pharmacy of Western Reserve University to make necessary improvements in its buildings.

An Educational Philosophy—We Have None*

By Frederick J. Wulling†

Pharmacy has no well-defined or formulated educational philosophy. I have always known this and have often tried to help toward formulating one. When, on March 10, 1884, I entered upon a pharmaceutical apprenticeship, after several years of medical and botanical reading and study, I mentioned this lack to my preceptor. He said: "You are right. Let us begin working on one right now." Neither of us realized the difficulty involved, but had some knowledge of philosophy in general. We both were without experience in doing things that had to be done collectively and formulated educational objectives far beyond those observed up to that time. We presented these to a gathering of Brooklyn and New York pharmacists at which many graduates of the New York and Philadelphia Colleges of Pharmacy, and pharmacists who had obtained their education in Germany and Scandinavian countries, were present. The resolutions were immediately and forcefully opposed on the ground that, if made effective, they would interfere seriously with the existing order of things and would increase the cost of doing business and, what was thought especially objectionable, would increase the wages of assistants. Self-interest was so formidable that the resolutions were promptly defeated. In this attempt at educational advancement, whose first objective was the gradual raising of prerequisites to high-school graduation, we got exactly nowhere. We learned, however, of the negative force of self-interest and of the difficulty in the way of all advancement. It was opposition of this sort that I encountered continuously, at different levels, through a long life of work in the interest of pharmaceutical education.

I had already realized that advancement must be made collectively, and now I learned that such advancement could be made only by convincing individual minds, against their thoughts of self-interest, of the value to the profession at large of reasonable and needed reforms. This brought me to the unhappy realization that the great majority of the members of the profession lacked entirely the conception of the profession as a composite entity to which each owed a devotion and loyalty. This discovery pointed to an objective primary to all others and that was to create a solidarity, a fraternity of interest of all pharmacists in matters of common concern, including especially education. Pharmacy would never advance abreast with other professions if pharmacists refused to unite toward mutual affirmative ends.

My preceptor gave up all further initiative in the matter. I did not, but kept it up and am still at it

with the same convictions with which I started out in 1884, now fifty-five years ago and still we have not developed a philosophy of education.

Much has been accomplished in the past half-century in the advancement of pharmaceutical education. No one will deny that, but what has not been achieved is an educational parity with other professions, notably not with medicine, nor with dentistry. The three health sciences or professions are medicine, pharmacy and dentistry. As far as their responsibilities to those needing their respective services are concerned, they are on a parity. Based on this responsibility, their educational requirements should be identical. That these three professions have unequal scholastic standards is due to a lack of a philosophy of education to govern them. All other divisions of education, elementary, secondary and higher, suffer from the same lack. What they all have are varying and various policies or procedures for advancement. There is a difference between philosophy and a policy. Philosophy is the pursuit of wisdom or of knowledge of things and their causes. A policy is merely a course of action or procedure, and although it usually shows insight and practical wisdom, too often it lacks these qualities. There are many and varied policies, that is, they are not based on *uniformity* or on a single basic principle. A policy is a method, whereas philosophy is a science. There is, therefore, a science of education based upon or governed by a philosophy of education. This philosophy has not yet been discerned and defined in its fullness. In mental perception and discernment, easy things come first. Philosophy is not easy to comprehend and formulate, but soon its turn will come to receive the deep thought of many mature minds and then its science will become recognized and understood and applied practically to all forms of education, with affirmative results. Although most pharmaceutical educators have been entirely unaware of such a philosophy, they really need not feel badly that they have not developed it when specialists in education such as the faculties of schools of education have so far failed to do so. But neither they nor any other single body will or can alone give the world a philosophy of education. Many minds from all fields of education and from other fields will be required for individual and collective study of the subject. A parliament of education is in order. Certainly this Section, the American Association of Colleges of Pharmacy, and the Council on Pharmaceutical Education should now begin to study the matter in some collective way and in due time the discovery will be made that according to underlying truth and philosophy, the educational requirements of pharmacy are the same as those of any other profession.

* Presented before the Section on Education and Legislation, A. Ph. A., Atlanta meeting, 1939.

† Dean Emeritus, University of Minnesota.

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Mr. Weicker is survived by his wife, Mrs. Florence Palmer Weicker; three sons, Theodore, Jr., Lowell Palmer and Frederick Ernest; and one daughter, Florence Palmer Weicker, 2nd.

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David E. Ushkow

Mr. Ushkow, founder and president of Endo Products, Inc., died on July 16th. A graduate of Columbia University School of Pharmacy, he made pharmacy his life work and his hobby as well, his collection of mortars being one of the most interesting and complete in the country. In his early days, in his own establishment, he became convinced of the need for surgical supply depots and spent practically his entire life in the pharmaceutical and surgical supply business. His last days were made happy by the realization of two of his aims: acceptance by the Council of Pharmacy and Chemistry of the American Medical Association and a permanent home for Endo Products, Inc.

Mrs. Eugenia Long Harper

Mrs. Harper, daughter of Dr. Crawford W. Long, and only living child of Dr. Long, discoverer of ether as an anesthetic, died in Atlanta, Ga., on July 5th, aged eighty-six. She had been in ill health since April. Shortly after attending a celebration in Jefferson, Ga., on April 8th, in conjunction with the first-day sale of the Crawford W. Long memorial postage stamp, she was injured in a fall, according to the *New York Times*.

OBITUARY

Theodore Weicker

Theodore Weicker, Chairman of the Board of E. R. Squibb & Sons, died at his home in Greenwich, Conn., August 7th, in his 80th year. Funeral services were held on August 9th at the Riverside Church, Riverside Drive and 122nd St., New York City.

Mr. Weicker was born in Darmstadt, Germany, in 1861. After graduation he joined the old German house of E. Merck. In 1882 he went to London where he became associated with a general export house. In 1887 he came to New York and immediately applied for citizenship. At his insistence Merck & Co. established a branch in this country to take the place of the agency in Germany. Mr. Weicker was managing partner of this branch for fifteen years.

We regret to announce the death of Mrs. Hans Christensen, mother of Mr. H. C. Christensen, Secretary of the N. A. B. P. and past-president of the A. Ph. A. Mr. and Mrs. Christensen left Chicago for Minden, Nebraska, on Friday night, August 16th, to attend the funeral. Mr. Christensen's mother was ninety-eight years of age and is survived by four sons and one daughter in addition to grandchildren and great grandchildren.

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He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911.

David E. Ushkow

Mr. Ushkow, founder and president of Endo Products, Inc., died on July 16th. A graduate of Columbia University School of Pharmacy, he made pharmacy his life work and his hobby as well, his collection of mortars being one of the most interesting and complete in the country. In his early days, in his own establishment, he became convinced of the need for surgical supply depots and spent practically his entire life in the pharmaceutical and surgical supply business. His last days were made happy by the realization of two of his aims: acceptance by the Council of Pharmacy and Chemistry of the American Medical Association and a permanent home for Endo Products, Inc.

Mrs. Eugenia Long Harper

Mrs. Harper, daughter of Dr. Crawford W. Long, and only living child of Dr. Long, discoverer of ether as an anesthetic, died in Atlanta, Ga., on July 5th, aged eighty-six. She had been in ill health since April. Shortly after attending a celebration in Jefferson, Ga., on April 8th, in conjunction with the first-day sale of the Crawford W. Long memorial postage stamp, she was injured in a fall, according to the *New York Times*.

OBITUARY

Theodore Weicker

Theodore Weicker, Chairman of the Board of R. Squibb & Sons, died at his home in Greenwich, Conn., August 7th, in his 80th year. Funeral services were held on August 9th at the Riverside Church, Riverside Drive and 122nd St., New York City.

Mr. Weicker was born in Darmstadt, Germany, 1861. After graduation he joined the old German house of E. Merck. In 1882 he went to London where he became associated with a general export house. In 1887 he came to New York and immediately applied for citizenship. At his insistence Merck & Co. established a branch in this country to take the place of the agency in Germany. Mr. Weicker was managing partner of this branch for ten years.

We regret to announce the death of Mrs. Hans Christensen, mother of Mr. H. C. Christensen, Secretary of the N. A. B. P. and past-president of the A. Ph. A. Mr. and Mrs. Christensen left Chicago for Minden, Nebraska, on Friday night, August 16th, to attend the funeral. Mr. Christensen's mother was ninety-eight years of age and is survived by four sons and one daughter in addition to grandchildren and great grandchildren.

Prize Membership Awards for 1940

The following students were awarded prize memberships in the AMERICAN PHARMACEUTICAL ASSOCIATION, for one year, for and by whom, as indicated:

BROOKLYN COLLEGE OF PHARMACY:

George Bornstein, Excellence in Scholarship.

CONNECTICUT COLLEGE OF PHARMACY:

Joseph Kraut, Milton Zimmerman and Benjamin Frankel, Having done most to further the interests of the Student Branch during the year (*Connecticut College of Pharmacy Student Branch*).

CREIGHTON UNIVERSITY: Sophomore Award, Raphael Bachmann, Highest General Average in Chemistry (*Connolly Prize*).

Junior Award, Warren Rix, Highest average in Biological Sciences (*Walter Prize*).

Senior Award, Edward Nielsen, Greatest Attainments In Pharmaceutical Technique (*Lee Prize*).

Senior Award, Norvin Jones, Highest Professional Ideals (*R. L. Whaley Prize*).

Freshman Award, Thomas Smith, Greatest Improvement In Ideals (*anonymous donor*).

General Scholastic Excellence, James Carr (*anonymous donor*).

DUQUESNE UNIVERSITY: Sister Mary Audrey Barksdale, Excellence in Department of Materia Medica (*Prof. Elbert Voss*).

John W. Boenigk, Excellence in Pharmacy (*Prof. R. R. Kreuer*).

Paul Boltacz, Excellence in Chemistry (*Dean H. C. Muldoon*).

MASSACHUSETTS COLLEGE OF PHARMACY:

Arthur J. McBay, Excellence in Pharmacy (*Prof. Leon A. Thompson*).

Frank C. Wheeler, Excellence in Analytical Chemistry (*Prof. E. V. Lynn*).

William Dlugove, Excellence in Business Administration (*Prof. Leon C. Ellis*).

Fred Elmadjian, Excellence in Organic Chemistry (*Treasurer I. P. Gammon*).

Theodore G. Metcalf, Excellence in Materia Medica (*Prof. Wm. H. Glover*).

Arnold A. Greene, Excellence in Prescription Dispensing (*Trustee Daniel O. Wolff*).

KANSAS CITY COLLEGE OF PHARMACY:

Robert H. Allen, Excellence in Scholarship (*Dean D. V. Whitney*).

ST. LOUIS COLLEGE OF PHARMACY: Asbury

B. Hirsch, Jr., Excellence in Past Year's Work.

UNIVERSITY OF KANSAS: Pershing D. Frederick, Excellence in Practical Pharmacy (*Dean L. D. Havenhill*).UNIVERSITY OF MINNESOTA: Reid Mickelsen, Highest Scholastic Average during First Two Years (*Rho Chi Society*).UNIVERSITY OF NEBRASKA: Margaret G. Dickerson, Second Highest Scholarship (*M. E. Rasdal*).UNIVERSITY OF NORTH CAROLINA: Lee A. Lorek, Excellence in Theoretical Pharmacy (*Prof. H. M. Burlage*).

WAYNE UNIVERSITY: Arthur Koorhan, Excellence in Scholarship (*Faculty Award*).

WOMEN'S AUXILIARY, MEMPHIS DRUG CLUB: James O. Adams, Highest Average in Botany.

READERS' COMMENT

A member writes: "I wish to take this opportunity of thanking those who edit the JOURNAL for publishing so much information which is of such great value to those going to school. Unless one is in school one cannot realize how much these articles mean."

Another member writes: "Enclosed find our check for Five Dollars (\$5.00) for one year's membership in the AMERICAN PHARMACEUTICAL ASSOCIATION. We have received a few sample copies of the JOURNAL, and in one of them we found one item which we are glad to say has in a short time meant more to us than the price of the membership for one year."

The North Dakota Pharmaceutical Association, at its recent convention, passed a resolution commenting on the distribution of the Practical Pharmacy Edition of the JOURNAL of the A. Ph. A. to its members and referred to the value of this publication to practicing pharmacists. Members of the Association were urged to join the A. Ph. A. in order to support the activities of the Association in supplying practicing pharmacists with the kind of information that will enable them to keep in touch with the pharmaceutical problems of the day.

A. A. A. S. Pharmacy Section Meeting

The next meeting of the American Association for the Advancement of Science will be held in Philadelphia during the week, December 27, 1940 to January 2, 1941. The program committee of the Pharmacy Section is planning for two sessions to be held in the morning and afternoon of Saturday, December 28, at the Bellevue-Stratford Hotel.

Scientific workers in the pharmaceutical sciences are invited to participate in the program. Those who wish to present papers are requested to submit titles to the chairman of the Section at an early date.

GLENN L. JENKINS, *Chairman*,

University of Minnesota, College of Pharmacy,
Minneapolis, Minn.

The Canadian Pharmaceutical Association Council meeting which took the place of the Convention for 1940 has just been completed and a resolution was passed to the effect that the regular annual convention of the Association will be held in Vancouver in 1941.

EDITORIAL

National Pharmacy Week in 1940

Once a year as the result of the foresight and planning of Robert J. Ruth, the founder of National Pharmacy Week, there is a concerted effort on the part of the pharmacists of the nation to bring to the attention of the public that professional service continues to receive their very best thought and effort. This year National Pharmacy Week will be observed from October 20th to 26th, and suggestions for this observance have long since been made available to state and local pharmaceutical associations and individual pharmacists through the efforts of the National Pharmacy Week Committee, headed by John E. O'Brien of Omaha, Nebraska.

For the benefit of those who have not already made their plans and received information and materials for display, there will be found throughout this issue of the *PRACTICAL PHARMACY EDITION* suggestions for Pharmacy Week window displays, radio talks and other forms of dignified publicity which will be helpful in focusing public attention upon the services which pharmacists render in promoting the public health and welfare.

On page 335 the splendid message of the President of the United States to the pharmacists of the nation, addressed to President Charles Evans of the *AMERICAN PHARMACEUTICAL ASSOCIATION*, is reproduced. The President's statement that "The druggist in our country, because of his location in every town and hamlet, should provide a valuable asset to the health authorities in every state" and that "at this time health will play a tremendous part in our preparation for national defense" indicates appreciation of the pharmacist as an important factor in the present emergency.

National Pharmacy Week, therefore, takes on added significance in 1940. It provides not only an opportunity to make the public pharmacy-conscious, but it also draws attention to the potential value of the retail drug store as a community center for the distribution of materials and information which have a profound relation to the national defense program.

A glance at foreign periodicals dealing with medicine and pharmacy reveals to what a large extent the professions concerned with health matters play a part in both military and civilian activities. Under modern conditions of warfare, especially in the defense against aggression from the air, civilian populations are exposed to dangers as great as, and possibly greater than, those which confront the soldier at the fighting front. This situation has led to defense activities which were hardly dreamed of in the years when preparation for war meant merely the building of ships, the manufacture of munitions, the transportation of armies and the maintenance of communications and food supplies. To-day these preparations must include care of civilians under stress of air raids, bombings and the transportation of large sections of populations from the more dangerous to the less dangerous areas. This, in turn, raises problems of sanitation, housing, food supply, prevention of disease and care of the sick and wounded under new and wholly unanticipated conditions.

It requires little imagination to conceive of the importance of the pharmacist under such conditions. Service in the military forces is but a small part of the responsibility which the members of the profession of pharmacy may be called upon to assume in emergencies.

The week of October 20th to 26th affords an opportunity to demonstrate to the people in our various home territories just how well the pharmacist is prepared to take his place with the physician and the nurse in supplying necessary health services day by day, and especially in emergencies.

We may believe that the public is aware of our professional activities, of the ways and means we have at hand for aiding in the prevention and cure of disease, but the chances are that the services of the pharmacy and the willingness of the pharmacist to do his bit are taken too much for granted. A well-

thought-out window display, accompanied by special emphasis on professional activities throughout the week, and mention of the work of the pharmacist in contacts with men and women in other walks of life, throughout Pharmacy Week, will serve to reemphasize the fact that well-equipped pharmacies and competent pharmacists are the best sources of general information on matters of public health and welfare in times of peace as well as in the hour of emergency. National Pharmacy Week offers the best single opportunity for concerted effort in this direction. Let us not miss that opportunity this year.

Unfair Venereal Disease Propaganda

The venereal disease division of the United States Public Health Service continues to prepare and broadcast literature and statements which impugn the ethics of the medical and pharmaceutical professions, as a whole, in an attempt to warn persons with venereal diseases against reliance on advertising doctors and nostrums to cure their ailments.

We subscribe fully to the necessity for adequate warnings against quackery in medicine and pharmacy, whether it be in connection with the diagnosis and treatment of venereal diseases or any other form of sickness. But, we do not subscribe to the circulation of literature, the language of which does not make it clear that the warnings are specifically directed to the very small minority of unethical physicians and pharmacists who prey upon the unfortunate venereally diseased members of society by offering inadequate treatment or "counterprescribed" remedies which cannot provide the advertised "cures" or "relief."

There is a way of writing the necessary announcements and literature to accomplish the ends sought without casting unfair and unnecessary reflections upon the vast majority of physicians and pharmacists, who are just as desirous of stamping out syphilis and gonorrhea as are the employees of the

United States Public Health Service and the State Health Departments.

If the objective of the sensational announcements, which are unfair to the professions, is to obtain wide publicity, we submit that much better results can be obtained by prosecutions of unethical physicians and pharmacists under State medical practice acts and Federal and State Food Drug and Cosmetic Laws and possibly under local ordinances. This, of course, requires actual investigation of reported unethical and quack procedures, careful preparation of evidence and filing of charges with consequent court procedure. However, it has the advantage of confining charges of quackery to those who actually practice it and if the charges result in convictions there is the moral effect of an example of what may happen to other offenders if they persist in violating the law and the ethics of their professions.

It is time for wholesale charges of quackery to be deleted from venereal disease campaign literature and to confine such references to citations of specific instances of wrong-doing. This will not only be a more effective method of calling attention to the existence of quackery but it will also be a much more effective method of stamping it out.

Drug Advertising by Non-Pharmacists

By AQUILLA JACKSON

Late Deputy Drug Commissioner of the State of Maryland

The use of the word "Drug" in advertising is sought by general merchants from the small corner storekeeper to the "super-market" manager. Herein the author discusses lawful ways and means of prohibiting the general merchandiser from trading on the professional dignity and reputation of pharmacy.

THE Maryland Pharmacy Law, under Article 43 of the Annotated Code, Section 229, gives the following definition of a pharmacy:

Every store or shop or other place where drugs, medicines or medicinal chemicals are dispensed or sold at retail, or displayed for sale at retail, or where physicians' prescriptions are compounded, or which has upon it or displayed within it, or affixed to or used in connection with it, a sign bearing the word or words "Pharmacist," "Pharmacy," "Apothecary," "Drug Store," "Druggist," "Drugs," "Medicines," "Medicine Store," "Drug Sundries," "Remedies" or any word or words of similar or like import, or where the characteristic show bottles or vials filled with colored liquids or otherwise colored, are exhibited or any store or shop or other place, with respect to which any of the above words are used in any advertisement shall be considered a pharmacy, within the meaning of this sub-title.

And, under Section 240 of the same law, the following information with respect to the sale of patent or proprietary medicines and household or domestic remedies is given:

Nothing in this sub-title shall be so construed as to prevent or in any way make unlawful, or interfere with, the sale or display by general merchants, of any proprietary or patent medicines; or the sale by such general merchants of commonly used household or domestic remedies, in original, unopened packages, or farm remedies or ingredients for spraying solutions, in bulk or otherwise, provided the said household or domestic remedies are clearly labeled with the ordinary name of the article or articles contained therein and the name of the manufacturer or distributor thereof, or the sale by such general merchants of doses of household or domestic remedies to be consumed upon the premises.

Both of the above sections of the law have been quoted in order that you might have an understanding of how the law operates, and thereby place yourself in the position

of assimilating that which will follow with respect to the advertising of drugs in Maryland by non-pharmacists.

Besides defining a pharmacy and identifying the drug products which may be sold by general merchants, the law has prescribed, under Section 239-a, that a person desiring to operate a pharmacy must first secure a permit from the Maryland Board of Pharmacy. The board has to be satisfied that the applicant will conduct the store in full compliance with the law and rules and regulations of the board; that the location and appointments of said pharmacy are such that it can be operated and maintained without endangering the public health or safety; and that said pharmacy will be constantly under the immediate supervision of a registered pharmacist.

In Maryland, violations of the Pharmacy Law by unlawfully advertising drugs or displaying drug signs by non-pharmacists are, fortunately, small in number. Over a period of years, however, there have been some violations, and these vary in character as well as in the types of stores in which they occur.

The types of stores may be sub-divided as follows: drugs in general stores, drugs in mail-order houses, drugs in five and ten cent stores, drugs in pineboard stores, drugs in department stores and drugs in food or super-markets.

In general stores, the usual violations consist of advertising in county papers, church pamphlets, and, occasionally, an advertisement will appear in the telephone directory. Then, too, some firms, which prepare signs either for inside or outside display, in ad-

vertising nationally known drugs occasionally use the words: druggist, pharmacy or drugs in the wording of the advertisement, and these signs find their way into general merchandising establishments. The signs when prepared were meant, no doubt, for the use of pharmacists only, but, as stated above, they sometimes find their way in the shops of general merchants.

Mail-order houses advertise drugs in their catalogues, but since these catalogues are mailed into every state in the Union it is doubtful whether this can be stopped in any particular state. It may be a problem for the Federal authorities to consider, as this matter, no doubt, would come under the laws of interstate commerce. In Maryland, one of the mail-order houses employs a registered pharmacist, but even this does not permit it to advertise drugs and medicines, or to use similar words in its local advertisements.

The five and ten cent stores in Maryland give the department very little trouble. There is a store in Baltimore, which is closely related to this type of store, that held a demonstration recently which was considered a violation of that section of the Pharmacy Law relating to medicine shows. This display and demonstration consisted of a skull, a live animal, probably a guinea pig, an array of signs and various patent and proprietary medicines. The demonstrator had quite a line of salesmanship, but his knowledge of drugs and medicines was not very intelligent or enlightening. To be fair, however, the local manager of this establishment was not in sympathy with the program, and in his defense stated that this had originated in the New York office, and that he was glad to be told to discontinue this farce at once.

The pineboard type of store is one in which care must be exercised as to the advertising of drugs, because there is a possibility of forcing them or causing them to file an application for a permit to conduct a pharmacy. This, of course, is not desirable as the owners as a rule are not pharmacists

and in all likelihood do not entertain the same feeling or regard for pharmacy as compared with the pharmacist himself. Again, this type of store quite often extends its activities to drugs which may be questionable as to whether they should be sold by those other than registered pharmacists.

Department Store Advertising

Most department stores carry a line of patent and proprietary medicines as well as so-called household and domestic remedies, and the question frequently arises involving certain preparations which should not be sold except under the immediate supervision of a registered pharmacist. From time to time department stores will advertise in newspapers under the caption "Drugs and Toilet Articles" or similar terms. In some instances, the store employs the services of a registered pharmacist, and for this reason assumes that this gives the establishment the right to advertise drugs and medicines. This, of course, is not true under the Maryland law for reasons which have been explained under Section 229. At times, when confronted with this information, the representatives of these stores seem surprised and perturbed, but after familiarizing themselves with the language of the law, they come to realize that the facts have been stated and must be accepted.

Super-Market Advertising

This brings us to food fairs or super-markets. Unfortunately, this type of distributor has given the Department some trouble. In one of the food fairs in Baltimore, a registered pharmacist was placed in charge of its "drug department," and as in the case of the department stores, this concern thought it could advertise drugs and medicines. Poisons and exempt narcotics were not sold, but, as stated above, drugs were advertised. The representative of this concern insisted that his firm wanted to comply with the law, but he could see no reason why he should not advertise drugs, particularly when a registered phar-

macist was in charge of the drug department. When informed that if he wanted to advertise drugs he would have to secure a permit according to the provisions of the Maryland Pharmacy Law, he balked for several reasons, the most important ones being that his concern did not want to go to the expense nor use the space that a prescription department would require.

At the same time, he was informed that the Board of Pharmacy had ruled that open stores such as are found in supermarkets and similar places are not conducive to public health, that they are not safe for the dispensing of poisons, dangerous drugs and narcotics, and consequently are not in a position to serve the public adequately and safely. As a result, the drug sign was removed as well as certain items which had been stocked and which could not be sold by the concern after the services of the registered pharmacist had been discontinued. Ultimately, this problem was solved to the satisfaction of all concerned, and the experience of combating it successfully was quite valuable, and as in most cases of a similar character, the experience gained in this case may serve as a standard for comparison in other cases.

While the following type of store was not classified with the others at the beginning of this article, at the same time it is important that it be included. The store referred to is one which a pharmacist has operated for years as a pharmacy, and, upon his death, his heirs continue to conduct the pharmacy for a while and then decide to convert it into a so-called patent medicine store. This procedure often requires a great deal of patience on the part of those who are charged with the enforcement of the law because, in many instances, the successor is a son of the deceased pharmacist, and no doubt he has had a great deal of practical experience. It is rather difficult in these cases to have drug signs removed, all open containers of drugs and chemicals, poisons, etc., but in time it usually works out in a generally satisfactory manner.

Intent, an Important Factor

In general, advertisements by non-pharmacists will include a word or words which are in violation of the pharmacy law, but it is rather difficult to decide whether the offender intended to violate the law or not. One advertisement in particular comes to my mind, and I shall produce it as it appeared originally:

"Lemon Juice Recipe Checks Rheumatic Pain Quickly"

If you suffer from rheumatic arthritis or neuritis pain, try this simple inexpensive home recipe that thousands are using. Get a package of R Compound today. Mix it with a quart of water, add the juice of four lemons. It's easy. No trouble at all and pleasant. You need only two tablespoonfuls two times. Often within forty-eight hours—sometimes overnight—splendid results are obtained. If the pains do not quickly leave and if you do not feel better, R will cost you nothing to try as it is sold by your druggist under an absolute money back guarantee. R Compound is for sale and recommended by

The B Cut Rate Store

Needless to say, this store is not conducted as a pharmacy, but when, as stated in the advertisement, that "it is sold by your druggist," the inference is that the B Cut Rate Store is a drug store, and for this reason the advertisement is considered a violation of the Pharmacy Act.

Just recently in this State, a wholesaler, whose principal business is tobacco, candy, novelties, etc. and who carries some twelve or fifteen fast-selling drug items in stock, wanted to know if he could advertise and place a sign on his building bearing these words: E Drug Company. He stated that his reason for wanting to do this was that certain manufacturers had refused to sell him drugs because he did not operate a wholesale drug establishment. While most State Pharmacy Acts, including Maryland, do not identify a drug wholesaler, it might be well to give this matter some study and consideration. Confining drug sales to legitimate wholesalers and retail pharmacists should receive general approval from those engaged in this field.

What It Means to Be at War

The following articles and excerpts from a summary of war-time information taken from recent issues of The Pharmaceutical Journal, official organ of the Pharmaceutical Society of Great Britain, tell their own story and should be very illuminating to American pharmacists.

Some Lessons of the Raids

ALTHOUGH during the past week (August 18th-24th) a good many bombs have been dropped on our towns and villages, as well as on open country, casualties appear to have been relatively few, and in consequence any general deductions as to the role which civilian pharmacists should play ought perhaps to be avoided for the time being. One or two definite points can, however, be made.

Thus there is ample evidence from reports which have reached us that the abundance of glass in an ordinary pharmacy makes such premises quite unsuitable for the treatment of wounded either during or after a raid. Of four pharmacies in a London suburban area which was raided, the damage in three was slight and in the fourth severe. But in every instance glass windows or glass show-cases were splintered, and in the severely damaged shop hardly one piece of glass was left whole, although the premises themselves suffered no structural damage. As might be expected, subsequent to the raid there was a slightly larger demand than usual for "pick-me-ups" and sedatives, and chemists in the area report that on the following day general pharmaceutical business increased considerably.

The proprietor of the pharmacy which sustained the most damage has made what is so far the only claim that has yet been submitted to the N. P. U. air raid assistance fund, and there seems to be every prospect of his being rehabilitated before the expiry of the thirteen weeks during which he is entitled to benefit from the fund. Not so fortunate is the position of Bourjois, Ltd., whose Croydon factory sustained severe damage a week ago. Pharmacists generally and customers of the firm in particular will wish to extend to Bourjois their sympathy in this major disaster.

In these instances and in others in which our members have been concerned the precaution had, of course, been taken of insuring stock under the Board of Trade scheme. Here it is desirable to point out that from the date on which the Purchase Tax operates—probably October 1st—such insurance must cover the value of stock plus the tax.

Hence commodity insurance will then be compulsory on stock the value of which is now in the neighborhood of £750.

Other lessons which the week's air raids have taught include the prompt taking of cover, which implies the closing of the pharmacy to the public as soon as the sound of the sirens is heard; and the excellent service which is rendered by the local A. R. P. organizations. Indeed, it seems obvious, therefore, that any movement by pharmacists toward the giving of first aid to the injured must be part and parcel of the general scheme. There is also evidence of the value of local mutual assistance schemes, such as those which have been formulated at Wolverhampton, Grimsby, Plymouth and in other areas. Even in time of war the temporary closing of business may result in the permanent diversion of some customers, and hence it is obviously desirable that measures be taken to maintain contact so far as is practicable. One good point about the schemes which have been planned in the areas mentioned is their elasticity, and we have no doubt that modifications and improvements will already have been considered in the light of the past week's experiences.

* * *

Military Service

Pharmacists of all ages are in the Schedule of Reserved Occupations and are not liable to be called upon for military service. They are eligible to enlist in the Armed Forces but only for the purpose of doing pharmaceutical work. Pharmaceutical students who have completed two years in a course of study approved by the Pharmaceutical Society or in practical training under approved articles of pupilage, or partly in one and partly in the other are also in the Schedule of Reserved Occupations.

Requests for pharmacists to join one of H.M. Forces are received by the Society direct from the War Office Admiralty, or Air Ministry, as the case may be. Candidates between the ages of 21 and 45 years who have offered themselves for "Whole-time paid pharmaceutical service at home or abroad in one of H.M. Forces" are then selected from among those registered in the National Register of Pharmacists. It is not possible at present to aid the enlistment of men over this age limit. It is the practice of the Society first to approach pharmacists who are unemployed, and then those in evacuated areas who can most easily be spared.

The Society is unable to give pharmacists who have offered themselves for service with H.M. Forces any precise guidance upon the date when they will be called upon to fulfil their obligations. This

will depend upon many factors over which the Society has no control, such as the expansion of the medical services following the growth of H.M. Forces and the number of casualties suffered. Pharmacists are therefore particularly requested to continue in their civilian occupations until called upon by the Society.

Men in four more age groups will register for military service during July—the 1909 group on July 6, the 1908 group on July 13, 1907 on July 20, 1906 on July 27.

Protection of Windows

A Memorandum giving advice on the protection of windows is issued by the Ministry of Home Security, A. R. P. Department (Stationery Office, 4d. net). The following materials have been found to resist all fragments striking at right angles from a heavy bomb bursting 50 ft. away:

- 1½ in. thickness of mild steel plate or plates;
- 12 in. thickness of reinforced concrete;
- 13½ in. thickness of sound brickwork or sound stonework;
- 15 in. thickness of ordinary or structural concrete, unreinforced;
- 2 ft. thickness of ballast or broken stone;
- 2 ft. 6 in. thickness of earth or sand.

The treatment of glass with adhesives is aimed at preventing the glass from flying into small fragments. Materials mentioned are: thick, tough or reinforced paper applied with flour paste or acacia mucilage rendered slightly tacky by the addition of 5 per cent of glycerin or treacle; cardboard or textile materials, e. g., surgical plaster or insulating tape; and transparent wrapping films (including cellophane). The uncoated film may be applied with a good clear gum to which 15 per cent of glycerin has been added. For cellulose acetate film a mixture of nine parts of treacle with one part of warm water is suggested. Certain liquid coatings are now being sold as "anti-shatter" treatments. They should be renewed every two or three months. Some of these products consist of a solution of rubber, others probably have a cellulose ester basis. Further methods of protection include (against blast) the use of wire supports to clamps in the center of the window, and (against splintering) the coating of the windows with a thin film of plain gauze.

Lighting Restrictions

The Lighting (Restrictions) Order, 1939, prohibits from sunset to sunrise the display of any light inside any building unless the light is so obscured as to prevent any illumination being visible from outside. It prohibits the illumination, for the purposes of advertisement, of any fascia or advertisement, or the display of any light outside or at the entrance to any premises. The con-

cessions granted at the end of 1939 in respect of illuminated signs and shop window lighting have since been cancelled. It is no longer permissible, therefore, for illuminated signs bearing the words, e. g., "Pharmacy," "Open" to be used.

Protecting Bottles against Vibration

A strip of thin wood ¾ in. wide by ¼ in. thick can be run across each row of bottles about one-third of the way up. Alternatively, strong wire can be used.

British Pharmacopoeia Addendum

The second Addendum to the B. P. 1932 was published on June 14, 1940, when it automatically became official. It is an emergency Addendum, containing substitutes for cod liver oil (vitaminized oil) and monographs on other vitamin preparations. It permits arachis, cottonseed or sesame oil to be used in place of olive oil in camphorated oil and certain ointments. Copies can be obtained through ordinary booksellers, price 2s. net.

Cod Liver Oil

By the Cod Liver Oil (Control of Production) Order, 1939, No. 1885, the manufacture and refining of cod liver oil has been controlled since December 29, 1939. Licenses, obtainable from the Ministry of Food (Oils and Fats Branch), Great Westminster House, Horseferry Road, S. W. 1, are required by all persons engaged in the manufacture, production or refining of cod liver oil, or of any mixture of cod liver oil with any other vegetable oil, fat or marine oil. Manufacturers and wholesalers are rationing supplies to retailers. Vitaminized oil, B. P. Addendum, 1940, is a satisfactory substitute.

Empties

It is essential that all empties, especially those of boxwood and cardboard, be returned to suppliers without delay. No material can be spared for the manufacture of new outers and packing.

Ergot

The cost of ergot and its preparations has advanced by about 300 per cent on pre-war prices; supplies are difficult to obtain, and in consequence the War-Time Therapeutic Requirements Committee of the Medical Research Council have advised the exercise of strict economy in prescribing this drug. Five-grain tablets or capsules of prepared ergot are preferable to liquid or solid extracts.

Gas, Protection of Food and Drugs

The Ministry of Food have issued a booklet, "Food and Its Protection against Poison Gas" (Stationery Office, 3d. net), containing recommendations which are applicable to the storage of drugs.

Summarized briefly they are: Use an impervious covering such as sealed metal or metal-lined cases, glass bottles, earthenware vessels with well-fitting glass, metal or Bakelite lids. Good or fairly good protection is afforded by greaseproof paper, waxed, or papier-maché cartons, transparent cellulose wrappings (those based on benzyl cellulose are less satisfactory) and by bags lined with transparent cellulose wrappings. For protection against gas or vapor wooden and thick cardboard boxes can be employed if all the joints are tight, but they would be relatively useless against liquid poison gas. All fatty material must be regarded with suspicion after exposure to blister-gas vapor.

Hot Water Bottles

No new aluminium or rubber bottles are being made for the home market. Retailers should avail themselves of any offers for next season.

Iron Wire

Whether required by manufacturers for medicinal purposes or not, iron wire comes within the scope of the Control of Iron and Steel (No. 8) Order, 1940. A license must be obtained from the Ministry of Supply.

Ointment Bases

In place of olive oil, arachis, cottonseed or sesame oil may be used in hydrous ointment, B. P. and compound ointment B. P. In the place of the lard, hard paraffin and yellow soft paraffin in ointment of capsicum, simple ointment prepared with yellow soft paraffin may be used. In the place of the beeswax and benzoinated lard in ointment of tannic acid simple ointment prepared with yellow soft paraffin may be substituted.

Shop Hours

By an Order, which came into operation on October 30, 1939, the hours of compulsory closing (8 P.M., 9 P.M. on the late night) were changed to 6 P.M. and 7:30 P.M., respectively. Power was given to local authorities to substitute later hours, not later than 7 P.M. and 8 P.M. The Order was revoked at Easter, 1940, and the present hours are 8 P.M. and 9 P.M. on the late night, except where local authorities have made an Order for closing at an hour not earlier than 7 P.M. and 8 P.M. on the late night.

Therapeutic Substitutes Committee

A War-Time Therapeutic Requirements Committee has been set up by the Medical Research Council to advise on substitutes for drugs and chemicals which are difficult to obtain. The secretary is Dr. C. H. Hampshire, 44, Hallam Street, London, W. 1.

Pharmacy Display at Dental Convention

THE AMERICAN PHARMACEUTICAL ASSOCIATION participated in the scientific exhibits at the recent convention of the American Dental Association at Cleveland, Ohio. Prof. N. T. Chamberlin of the School of Pharmacy, Western Reserve University, was in charge of the exhibit which stressed the dental prescriptions and preparations that have been listed in the monthly articles by Prof. George C. Schicks, appearing in *THIS JOURNAL*.

Prof. Chamberlain writes that a large per cent of those passing the booth have given it careful attention. Only about 50% of the dentists attending this Convention seemed to be familiar with A. D. R. He believes there is a great field for prescription pharmacists along this line if they would awake to its possibilities. The basement-lighted show globes added much to the display's usefulness. A photograph of the display is reproduced on page 331.

The Lilly Digest

The findings recorded in the eighth annual "Lilly Digest" reflect the importance of the prescription department in a drug store. A study of the operations of 345 drug stores, each of which submitted separate reports which showed the number of prescriptions dispensed and the revenue received therefrom, reveals that these 345 stores had combined volume amounting to nearly \$12,000,000, of which prescription revenue accounted for \$1,387,856.78, about 12 per cent of the total sales. Over 1,500,000 prescriptions were dispensed. The average charge was 91 cents, about three times as great as the average of all sales in a drug store.

"The Lilly Digest" contains a number of tables showing a breakdown of drug store expenses by volume of sales and by size of the town or city. Copies of this publication may be obtained without charge from Eli Lilly and Company, Box 618, Indianapolis, Indiana.

New color blindness tests have been compiled by United States military authorities, thereby making this country independent of Germany and Japan, principal sources of previous color perception tests.

Color blindness, it has been estimated, occurs in from 3 to 4 per cent of men, while only about 0.3 per cent of women are afflicted. The disproportion is accounted for by the fact that the defect is in many cases inherited, remaining latent in the female and becoming manifest in the male offspring. It occurs both as a congenital defect and as an acquired affliction.

National Dental Program

By G. C. SCHICKS, *Chairman*

Formula Comments on Eighth Dental Formula Series

CAVITY lining or varnish is used daily in the dental office. Its purpose is to seal the dental tubuli and foramina in deep-seated cavities so as to protect the pulp. It is also used in the preparation for filling root canals.

Rosin, the residue left after distilling the volatile oil from turpentine, dissolved in a volatile solvent, makes a suitable varnish or lining for tooth cavities. The solvent is usually chloroform or acetone, in which it is freely soluble. Rosin is used in concentrations up to the saturation point. The formula presented is approximately a 7% solution. While rosin is soluble in chloroform or acetone, its solution is somewhat slow. Powdered rosin should not be used as it dissolves more slowly than the fragments and may contain an insoluble substance to help keep it in a powdered condition. U. S. P. rosin fragments should be used to make the solution. Rosin produces an acid solution. To make it neutral or slightly alkaline, sodium bicarbonate or mono-sodium carbonate is used. The acids are not neutralized immediately. It usually takes several days to accomplish this. These alkaline substances are not soluble in the solvent, so they precipitate on standing. The mixture should not be filtered. Only the clear portion is used as a varnish. The N. F. V recognized a pulp-capping varnish composed of mastic 9 Gm., balsam peru 9 cc., and chloroform to make 30 cc. It is occasionally called for.

Copal is another substance which makes an excellent cavity varnish. It is a resinous substance obtained largely from the East Indies. If the drug wholesaler does not stock copal it can be purchased from any of the wholesale crude drug houses.

Copal solution must be made as stated in the formula. A 3% solution has been found best suited for a dental varnish. It requires an excess of copal to make a 3% solution of the resinous extraction since a considerable part of copal is gum. This gum interferes with the extraction of the resin. Extraction of copal with a Soxhlet apparatus is easily accomplished. To facilitate the extraction the copal is mixed with an equal weight of washed sand. The copal swells during

extraction. If made in a flask, stir the gummy substance, breaking it up as much as possible. This is to aid the chloroform in extracting the rosin. If this is not done the solution will not contain the proper concentration of rosin. When chloroform is added to the clear extracted product it may turn turbid. This turbidity may be removed by filtering through purified talc. This is the kind of preparation the pharmacist should prepare well, for he understands the principles of extraction. If dispensed in a screw-capped bottle, be sure the cap is protected by paraffin paper as some caps are dissolved by this solution.

Atropine or belladonna depresses the secretion of saliva, mucus, sweat, tears and digestive juices such as gastric and pancreatic. The secretions of urine, milk and bile are not affected. The drug is eliminated largely through the kidneys, therefore the urine may be tested as an aid in identifying atropine poisoning.

Atropine and belladonna are used most often in dentistry, first, to suppress the flow of saliva and, second, to aid in overcoming the depressant effects of morphine on respiration. It is sometimes desirable for the dentist to check the flow of saliva before and after some operations. Dental prescriptions for these drugs do not often present incompatibilities, for they are usually prescribed alone. The most common incompatibility to watch for is with alkalies and alkaline carbonates. With these substances even if atropine is not always precipitated it may be decomposed.

Atropine and Tincture of Belladonna are preferred for dental use, but the extract and fluid-extract may be used. Since belladonna or the alkaloids of belladonna are used widely for treating intestinal conditions and other disorders, it would be well for the dentist to inquire whether or not the patient is taking medication. This may prevent the danger from overdoses.

Sterilization of dental instruments is important. It may be accomplished by the following methods: boiling, steam under pressure, dry heat, disinfectant drugs. The use of the autoclave, or steam under pressure, is the most

dependable. Boiling should always be resorted to if no other method of sterilization is used.

There is a constant demand for a cold sterilizing solution. Several such solutions are on the market. Most of them contain formaldehyde or phenyl mercuric nitrate. They sell for \$5.00 to \$5.50 a gallon. The formaldehyde formula presented is efficient but has the objection of a disagreeable, penetrating odor. It does not contain alcohol, therefore is inexpensive to make. Some proprietary articles containing formaldehyde and alcohol as ingredients sell for \$1.95 in quart quantities.

Phenyl mercuric nitrate in 1-12,500 dilution makes an effective germicidal solution if the instruments are in contact with it for at least ten minutes. It is comparatively non-toxic in this concentration.

The U. S. P. Saponated Solution of Cresol has about twice the germicidal power of phenol. A 10% dilution may be used for sterilizing barbed broaches, root files and surgical instruments. All débris should be removed before immersing instruments in any of the solutions. Water should be forced through hypodermic needles to clean them before immersing in solutions. The lumen of hypodermic needles is so small that the solution will not pass through unless forced through. Articles to be sterilized must remain in the solutions for at least ten minutes. If the articles are contaminated with resistant pathogenic spores these solutions are not to be depended upon.

Prescriptions Series VIII

CAVITY LINING

(a) ℞	Metric Approx.	Apoth. Equivalents
Resinæ	2.0 Gm.	℥ ss
Chloroformi	30.0 cc	℥ i
Misce.		

Sig: For dentists' use as a varnish or cavity lining.

Note: Preserve in well-closed containers. The addition of 0.6 Gm. (10 grains) of sodium bicarbonate will neutralize the acids from the rosin. Use clear solution if sodium bicarbonate is added. Do not filter.

(b) ℞	Metric Approx.	Apoth. Equivalents
Gum Copal	1.5 Gm.	gr. xxiii
Chloroform	30.0 cc.	℥ i

Note: Powder the Gum Copal, mix with equal weight of washed sand and place in a 250-cc. flask. Add the chloroform and shake occasionally during 24 hours or more. Filter off the liquid and add chloroform to make 30 cc. or one ounce. If turbid, shake with 2 Gm. of purified talc and filter. Solution is approximately 3% strength. Discard gummy residue in flask.

ANTISIALAGOGUE

(c) ℞	Metric Approx.	Apoth. Equivalents
Tabl. Atropinae Sulfatis	0.0005 Gm.	1/120 gr.

*D. T. D. No. XII

Sig: One every 3 hours as directed.

Note: Each tablet contains $\frac{1}{120}$ gr. Atropine Sulfate. Suppresses flow of saliva. Overcomes the depressant effects of morphine on respiration. Dryness in the throat is one of the first toxic symptoms.

*Dentur takes doses: Of such doses give twelve.

(d) ℞	Metric Approx.	Apoth. Equivalents
Tinctura Belladonnae	15.0 cc.	℥ ss

Sig: 12 drops as directed.

Note: 0.75 cc. (12 minims) representing approximately 0.2 mg. (one three-hundredths grain) of mydriatic alkaloids. 10-12 drops (average dose) should dry up the salivary secretions appreciably in $2\frac{1}{2}$ to 3 hours. Dryness in the throat is one of the first toxic symptoms.

DISINFECTING FLUID—COLD PROCESS

(e) ℞	Metric Approx.	Apoth. Equivalents
Soln. Formaldehyde	266.0 cc.	℥ viiiss
Sodium Borate	30.0 Gm.	℥ i
Dist. Water q. s. ad	480.0 cc.	℥ xvi

M.

Sig: Disinfecting fluid for instruments.

Note: Sterilization by heat is preferable. Does not rust instruments. Hypodermic needles should be rinsed inside and outside before using solution. None of the common solutions for this purpose will penetrate the lumen of the needle.

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
September 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

The eighth series of dental prescriptions calls for cavity lining preparations, drugs to decrease the flow of saliva and a solution for cold disinfection of instruments

Gum Copal has proved to be an excellent substance for sealing dental tubules. It forms a very hard coating and is not penetrated by liquids. Copal has been used in varnishes for many years by the paint industry. It makes one of the best cavity varnishes.

The rosin formula is the choice of many dentists. It may be prepared in an approximately neutral

solution by using an alkaline carbonate in the formula presented.

Atropine and Tincture of Belladonna are efficient in decreasing the flow of saliva during anesthesia in dental operations and mercurial salivation. The doses stated are for adults. Children should be given smaller doses.

Cold disinfection is not as effective as that produced by heat. All apparatus should be cleansed before using the solution for cold sterilization. It does not penetrate the lumen of hypodermic needles. If you want the solution inside the needle, it must be forced through. Those on the market require the same procedure to enter the needle. We can supply you with this solution in gallons or smaller quantities at a very reasonable price.

We shall be pleased to prepare your sterile hypodermic solutions for you if you desire.

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession



A. Ph. A. Exhibit of Dental Pharmaceuticals at the A. D. A. Convention in Cleveland

The Hiring of Unregistered Drug Clerks*

By CLARENCE M. BROWN†

ONE of the most forceful methods that can be applied to the promotion of sales lies in the hiring of competent clerks. Proprietors frequently find that the men or women hired through letters of application, recommendations and personal interviews, are at first satisfactory but later do not measure up to expectation. The employee is in a position which soon grows unbearable and looks elsewhere for work, and the employer finds that he has lost both time and money and even customers. Modern business demands the elimination of both the incompetent and the unwilling worker through detection, if possible, of the lack of capacity in the applicant for a position before he is hired. If there is no capacity, no amount of training will ever produce or develop a successful and competent salesman. Pharmacists have modernized their stores and business methods during the last few years; they must modernize their method of selection of unregistered clerks.

In a paper presented last year before this section, the fallacy of depending entirely upon letters of recommendation and even upon the personal interview as a basis of hiring, was pointed out (1). This paper is in a way a continuation of a former one. With the help of Dr. Harold E. Burt and Mr. John L. Holmes of the Department of Psychology of Ohio State University and of Richard J. Weaver and Max W. Clayton, seniors of the College of Pharmacy of the same university, the possibility of hiring drug clerks by methods similar to those used by the modern employment office, has been further investigated but not yet completed.

Necessary Traits

The duties of the pharmacist and the unregistered drug clerk are so similar in character in many respects, that the list of traits necessary for a successful pharmacist as set forth in the Charters' survey (2) were used as the starting point. They are:

Professional technique	Accuracy
Professional interest	Courtesy
Service	Self-confidence
Health	Ability to gain confidence
Neatness	Honesty
Dependability	Judgment
Administrative ability	Orderliness

Resourcefulness	Self-respect
Coöperation	Industriousness
Interest in the community	Self-control
Perseverance	Fairness
Adaptability	Concentration
Forcefulness	Cheerfulness
Intelligence	Memory
Cleanliness	Tact
Kindliness	Speed
Artistic sense	

The first two traits of the above list were eliminated as a prerequisite for our purpose. The remaining qualifications were printed and sent to one hundred and twenty-five retail druggists (proprietors or managers) throughout Ohio with a request for them to check those which they required or desired of their unregistered clerks. Sixty-three of the questionnaires were returned. In many cases only ten characteristics were checked with the explanation that if a clerk possessed these he would be most likely to have many, if not all, of the others also, since each is not mutually exclusive.

These ten most frequently checked qualities have been used as the basis of all further study. They were arranged in the order of importance as checked by the sixty-three pharmacists (proprietors or managers) and an "average-weight-rank" figured for each. This was done by reversing the numbers of the order of importance of each characteristic and multiplying by the frequency with which it was checked for that place. The ten characteristics of the above list adjudged most important, together with their "average-weight-rank" are as follows:

1. Honesty	501	6. Health	147
2. Courtesy	220	7. Service	141
3. Dependability	205	8. Cleanliness	127
4. Intelligence	184	9. Neatness	126
5. Accuracy	166	10. Judgment	98

These then are the ten traits which must qualify an individual who would be successful in the capacity of a drug clerk.

A Program of Tests

The next step taken was to establish if possible:

- (1) Which of these traits can be most accurately determinable through the personal interview, or letters of recommendation or application.
- (2) Which can be ascertained only through a trial period of work.
- (3) Which can be determined psychologically.

* Presented before the Section on Pharmaceutical Economics, A. PH. A., Atlanta meeting, 1939.

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It soon became quite clear that the logical method of procedure was to determine, first, which of the qualifications could be determined by the psychological tests now available. Tests for general intelligence, accuracy and capacity are being used at the present by many employment managers. The tests which have been found very satisfactory for checking general intelligence are the "Senior Classification Test" and the "Senior Verification Test." These two tests have been devised by Doctors S. L. and L. C. Pressey of the Department of Psychology of Ohio State University and are published by the Public School Publishing Company of Bloomington, Illinois.

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It is a little difficult to describe these tests without violation of the copyright. Briefly each consists of ninety-six questions and are of four typical types; namely, Opposites, Informative, Practical Arithmetic and Common Sense, arranged in a cyclic order for convenience in giving and scoring. To each question there are given five possible answers, only one of which is correct. The correct answer is to be underlined, thus doing away with any writing upon the part of the individual taking the test. Examples of the four types of questions are:

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were bought for \$3.50, what change would be received from a five dollar bill? \$2.50, \$1.00, \$3.50, \$1.50, \$0.90. \$1.50 is underlined.

(D) Common Sense: What would you do in case you were ill? Scream, send for a doctor, eat dinner or read the paper. Send for a doctor is underlined.

In testing for accuracy and speed, the "Minnesota Vocational Test for Clerical Workers" by Dorothy M. Andrew and Donald G. Patterson has been selected. This test is published by the Psychological Corporation of New York City. It is in two parts: Part I. Number checking; Part II. Name checking. In each part there are two hundred items, one hundred of which are the same and one hundred of which are different. The numbers range from three through twelve digits and the names from seven through sixteen letters. The tests are so arranged that the first one hundred items may be rapidly compared with the second hundred. For example:

A. Number checking:

79542	79254	
5794367	5794367	×
527384578	527384578	×

B. Name checking:

John C. Linder	John C. Lender	
Investor's Syndicate	Investor's Syndicate	×
Corgill Grain Company	Corgil Grain Company	

If two names or two numbers are exactly alike, they are checked, otherwise not. Directions for giving and scoring are furnished. There is, of course, a speed element involved in both of these tests. The individuals taking the tests are told when to start and when to stop. To get all the numbers and names checked in a specified time and have them all correct is not as easy as it would seem.

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judgment in a test of this kind. It does, however, permit of a comparison of the reaction of the applicant with the reaction of that which would be acceptable in a particular store should the clerk ever have to make a quick decision. This unit of comparison of judgment, which varies from time to time and from manager to manager, has been designated as the "variable comparison factor" for the purposes of these experiments. While such a factor has no real psychological value or significance, it does give a "shadow picture" as it were of about how the applicant would react under specified conditions. Whether the reaction is "right" or "wrong" would depend upon the ideals or policy of the store. Do the prospective clerk and the manager agree as to what should be done under the specified conditions? No applicant will ever make a perfect score except by mere chance. This means that an arbitrary score must be selected as the lowest upon which an affirmative selection of applicants can be made.

As an illustration of the type of questions involved in this test the following are given:

1. What would you do if the label should be missing from a stock container that is in plain view of the customer (assuming there are no legal restrictions on its sale)?
 Throw the bottle and contents away?
 Report the circumstance to the manager at once?
 Guess what the contents are from location, color, taste, smell?
 Tell the customer you think it is the right substance?
 Tell the customer you are out of it and lose a sale?
 Tell the customer you are out of it and then ask if he has ever used ... for the same purpose?
 Tell the customer you are out of it but have something just as good?
 Sell the substance without saying anything to the customer of your doubt as to what it is?
2. What would you do if the customer complained of the price asked for an article?
 Argue with him over the price?
 Tell him to go somewhere else for it?
 Point out the quality of the article?
 Cut the price to meet that of a competitor?

Honesty, Courtesy, Service, Health, Dependability and Neatness—none of these traits can be tested for psychologically or by the "variable comparison factor" method, but can only be checked after hiring or during a trial period of employment. Therefore, it is suggested that employment be based upon the merits of the scores made in the

general intelligence, accuracy and judgment tests when considered in conjunction with the personal interview and letters of recommendation and the questionnaires upon health, social habits and educational background.

Capacity or aptitude for pharmacy will have been in a way partially established or found lacking by the three tests just described, but it would be more desirable to have a specialization test of this type of pharmacy alone. Such tests now exist for certain trades. Walter VanDyke Bingham in his book, "Aptitude and Aptitude Testing," published by Harper and Brothers, in 1937, describes several. To devise an aptitude test of the type needed as an aid in the selection of good drug clerks requires time, further study and finances.

Only a rather hazy idea exists at present of what an aptitude test for pharmacy should consist. It is most probable that certain pieces of "apparatus" will need be devised and perfected through trial upon a group of individuals. These men and women will have to be selected for their superior adaptability for work in a drug store. A rather large number of such individuals must be found; their consent to experimentation must be obtained and their expenses must be paid. The services of at least one trained psychologist must also be had to evaluate results. A second and even a third group of average and poor clerks will very likely also be needed to "set the standards." We cannot at present, therefore, reveal the details of the problem involved, but we do feel that we have made some progress during the past year and are hopeful that in some way in the near future, the financial aid will be forthcoming.

Reference

- (1) C. M. Brown, *Jour. A. Ph. A.*, 5 (1939), 312.
- (2) W. W. Charters, "Basic Material for a Pharmaceutical Curriculum."

Book Review

The Chemist's Dictionary of Synonyms, incorporating Rouse's Synonyms. Published at the Office of the Chemist and Druggist, 28 Essex Street, Strand, London, W.C.2, 1940. 6 x 9, 136 pages. Price, postpaid, 5s., 4d.

The purpose of the publication is to supply definitions of terms for quick reference in the pharmacy and while the book is intended for the British pharmacy, where pharmacists are referred to as "chemists," it has related value for all pharmacists. Very likely the synonyms will be brought to the attention of American pharmacists more frequently because of war conditions. Acknowledgment of a review copy is made by the AMERICAN PHARMACEUTICAL ASSOCIATION.—E. G. E.

National Pharmacy Week Section

[[A Message from the President of the United States to the Pharmacists of the Nation]]

THE WHITE HOUSE
WASHINGTON

September 19, 1940

My dear Dr. Evans:

On the occasion of the observance of National Pharmacy Week from October twentieth to twenty-sixth, let me express through you to the members of the American Pharmaceutical Association my deepest appreciation of the part they are playing in the improvement of the health of the Nation.

The druggist in our country, because of his location in every town and hamlet, should provide a valuable asset to the health authorities in every state. Your increasingly high standards help to make the pharmacist more valuable in this regard. It is heartening to see your association assume and exercise the responsibility among your members, for at this time health will play a tremendous part in our preparation for national defense.

Very sincerely yours,



Dr. Charles H. Evans,
President,
American Pharmaceutical Association,
218 Main Street,
Warrenton, Georgia.

Other Pharmacy Week Messages

From President Evans

We find that in the very dawn of history the wisest and most learned men directed their efforts to the compounding and use of medicinal preparations and throughout the succeeding centuries the apothecary has taken it for granted that the public fully realized and appreciated the multitude of services rendered by his profession. However, in these modern times, with the many changes that have taken place in the drug stores, with the drug store being looked upon as not only a health center but the community center as well, it remained for Robert J. Ruth to bring to the attention of Pharmacy the need for a concentrated appeal to be directed to the public for a deeper appreciation of the pharmacist and the service he renders to the community he serves. Consequently, National Pharmacy Week was set aside and for sixteen years the pharmacists of America have brought a program of education to the public relative to the mission and service of Pharmacy.

So again, on this annual observance of National Pharmacy Week—October 20 to October 26, 1940—as President of the AMERICAN PHARMACEUTICAL ASSOCIATION, I call upon each member of our profession, regardless of group affiliation, to bring the message of Pharmacy to the public. Let us in our daily efforts through an intensive program of publicity of the highest type inform the public of the service we render in matters pertaining to the public health of our people.

We should so gear our professional activities to the general routine of our stores so that every week would be Pharmacy Week and that our annual observance would be simply a rededication of ourselves to the Code of Ethics of our profession.

CHARLES HALL EVANS, *President,*
AMERICAN PHARMACEUTICAL ASSOCIATION

From Chairman O'Brien

The National Pharmacy Week Committee has outlined a simple and yet comprehensive program for the Sixteenth Annual Observance and one which every pharmacist can assist in carrying out. It has been carefully designed to require the least expenditure of time and money and, at the same time, to bring the message pointedly to the attention of the greatest number of our patrons. Each pharmacist can carry out at least some part of the program.

In turn, the Committee requests that *every* pharmacist study the program and *plan now* to put it into effect so far as he can during the week of October 20th to 26th. If *every* pharmacist will do a part, this observance will be a great step forward in the movement.

This appeal is directed particularly to the retail pharmacists. The public gains its impression of pharmacy almost entirely from the drug stores it patronizes. This appearance and service make either a favorable impression or the opposite. While others can assist, the Pharmacy Week movement will succeed through the support of retail pharmacists or will fail because they do not support it.

Very recent experiences have shown the *necessity of emphasizing* the professional public health services which the pharmacists render the public through the drug stores. This should be done every day in every year in every drug store. National Pharmacy Week offers a special opportunity to concentrate on this important objective and to put the combined influence of the whole profession back of it on a national scale.

JOHN E. O'BRIEN, *Chairman,*
National Pharmacy Week Committee

A MODEL SCHEDULE FOR NATIONAL PHARMACY WEEK

October 20-26, 1940

(Suggestions for various days will of course be adjusted to coincide with established days for civic club meetings and radio broadcast schedules.)

Radio Broadcast material, articles for journals and other advertising matter may be obtained from John E. O'Brien, Chairman National Pharmacy Week Committee, 17th & Douglas, Omaha, Nebraska.

Saturday October 19

Make sure that your Pharmacy Week Window Display has been properly installed and all personnel has been informed to refer to Pharmacy Week in conversation with the public next week (October 20-26).

Confer with your local association officers or with your colleagues, where there is no local association, to make sure that all have window displays; arrangements for radio broadcasts, newspaper advertising, luncheons, dinners and speakers for the week have been attended to. Have you placed a Pharmacy Week advertisement in Sunday's paper?

Consult your newspaper to get the exact time of the Coast to Coast Pharmacy Week Broadcast over the *Mutual Broadcasting System* emanating from Cincinnati, Ohio, on Sunday afternoon under the sponsorship of the Ohio Valley Druggists' Association and featuring John E. O'Brien, Chairman National Pharmacy Week Committee.

Sunday October 20

Morning: Give thanks that 1940 National Pharmacy Week finds us still at peace and pray for its continuance. Look over your Pharmacy Week Program to assure final attention to all details.

Afternoon: Tune in on the Mutual Broadcasting System for the Dramatized Pharmacy Week message, featuring John E. O'Brien, Chairman of the National Pharmacy Week Committee. If your store is open, let this broadcast be heard by clerks and clients. For exact time, consult your newspaper.

Monday October 21

Luncheon: Arrange for Pharmacy Week Luncheon at your local hotel or Chamber of Commerce. Each pharmacist should invite five friends in the business and professional world to be his guests and either speak of National Pharmacy Week himself or invite a speaker to do so.

Dinner: Hundreds of city pharmaceutical associations will hold a Banquet at one of

their leading hotels, and again the pharmacists will invite their friends and clients to attend. A Speaker will talk on "Pharmacy the Profession." The National Committee can furnish copies of appropriate talks for these occasions. See also page 341.

Tuesday October 22

Radio Broadcast by President Charles Evans of the American Pharmaceutical Association and others. Watch newspapers for announcements of the national broadcasting chains and arrange for local radio programs over your home station. Radio talks on Pharmacy may be obtained from the Committee.

Wednesday October 23

These and many other civic organizations, as well as parent-teacher, patriotic and business associations will welcome addresses on Pharmacy at their meetings during the week. You can arrange for the speaker or speak yourself. Suggested speeches are available. See page 341.

Thursday October 24

If you have not yet taken a photograph of your Pharmacy Week Window Display, be sure you do it to-day. See suggestions on page 340. Every display is a potential winner of the Robert J. Ruth Pharmacy Week Trophy.

Friday October 25

Review the week's program and complete any detail which may have escaped your attention. It is not too late for a Pharmacy Week Luncheon if you failed to arrange it earlier.

Be sure your physician and dentist friends have been made aware of your special displays and advertising.

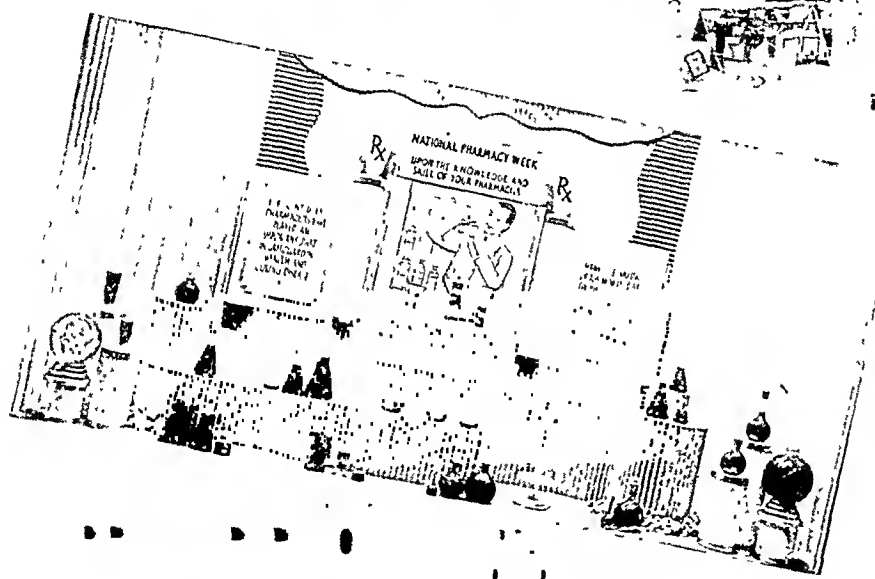
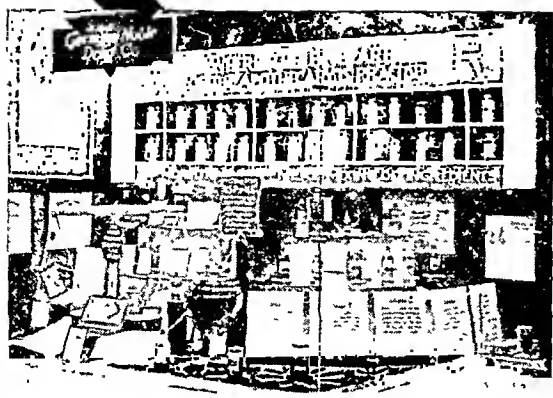
Saturday October 26

Last call for photographs. Supply your newspaper with a summary of the week's activities and accomplishments and a statement on the progress of pharmacy in its professional aspects.

Suggested Displa

NATIONAL PHARMACY

October 194



Pharmacy Week for 19

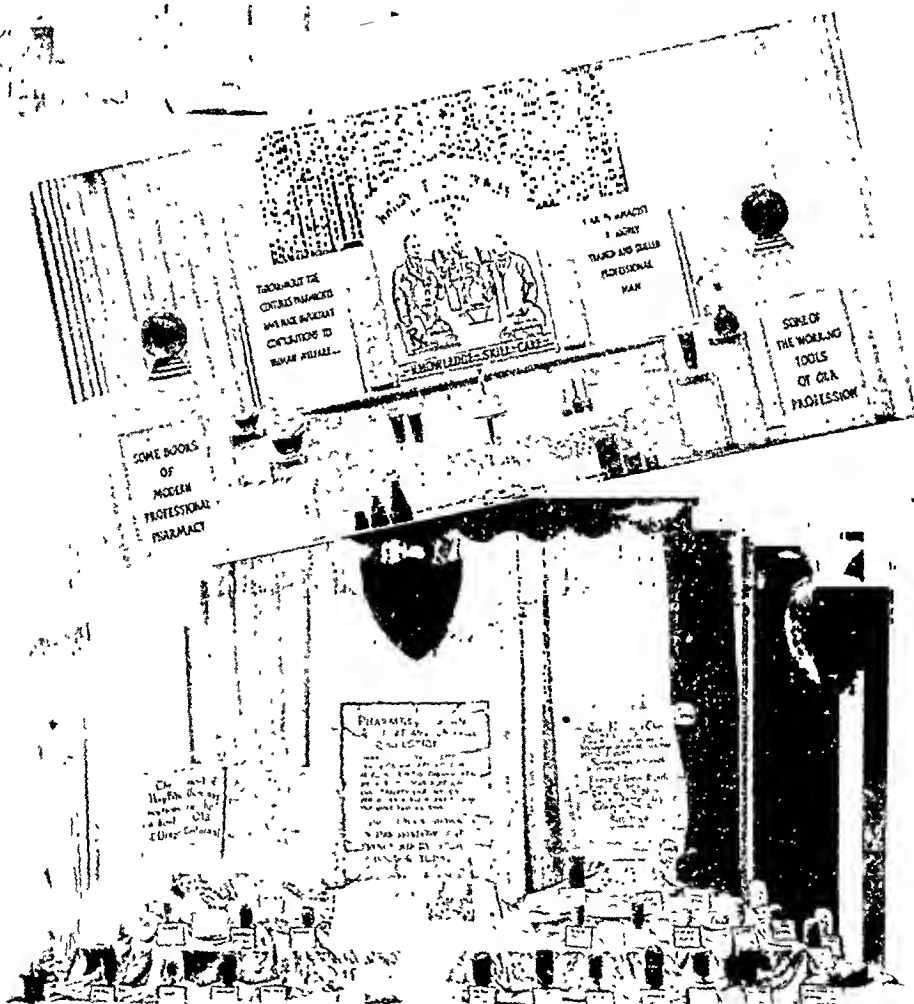
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Pharmacy Week Prize Window for 1936



Pharmacy Week Prize Window for 1938

Rules for National Pharmacy Week Window Display Contest

1. Photographs of professional window displays must be submitted to the Secretary of the respective State Pharmaceutical Association on or before November 15, 1940, in order that the winner may be judged and entered in the National Contest.

2. Professional Pharmacy Week Windows must not contain any commercial advertising.

3. Pharmacy Week Windows which have been entered in former years will be ineligible.

4. Pharmacy Week Windows should convey some message which will inform the public of the professional character of pharmacy.

5. Pharmacy Week Windows may or may not carry out any particular theme and all windows will be judged upon the professional character, arrangement of window and the value of the message carried to the public.

6. Photographs submitted of windows should be 8 in. x 10 in. in size or some other suitable size so

that judges will be enabled to study details of the display.

7. Each State Association shall appoint a committee within its own state at some date prior to November 15th, and this committee will meet and select the best window within its state, and a photograph of that window shall be mailed to Mr. John E. O'Brien, 1700 Douglas Street, Omaha, Nebraska, not later than December 15, 1940.

8. As soon as possible after December 15th, a committee will be chosen to select the best window from the states as a whole and the pharmacist whose window is judged the best will be awarded the Robert J. Ruth trophy supplied by the Federal Wholesale Druggists' Association.

9. Only one photograph from each state may be entered in the National Contest, and that one will be the one which is judged to be the best in its own state.

Suggestions for Photographing a Pharmacy Week Display

1. Secure the best camera possible, which would be a film pack or cut film camera with ground-glass back. The second best would be the better roll film models with a mobile focusing mount and having a film size of $3\frac{1}{4}$ in. x $4\frac{1}{4}$ in. The $2\frac{1}{4}$ in. x $3\frac{3}{4}$ in. size may be used.

2. Have a tripod or, in its absence, some means to furnish a solid support for the camera.

3. Use a panchromatic type film or the new super-double X or superpan press.

4. Take photo at night.

5. Use only lights in window for photographing.

6. By means of paper or cloth shut out all reflections of light from interior of the store which may enter window.

7. Shut out all reflections from nearby signs or windows either by requesting that they be turned off for a few moments or have someone hold a large card between the window and the outside light which is reflecting into the window.

8. Take picture as nearly square as is possible. (That is, have the film surface in the camera as nearly parallel to the window glass as possible.)

9. Place the camera at an elevation so that the bottom of the camera is from one to two feet above the bottom of the window. Then if you have a ground glass, increase or decrease your distance from the window until the portion of the display to

be taken nearly fills the picture area. If no ground glass is available, use a conventional finder by allowing a little more area outside than desired as a safety margin. Undesirable portions may be eliminated upon enlarging.

Measure accurately the distance from the camera lens to the glass, then estimate it to the center of the display. Set the focus mount to this footage unless a ground glass can determine a sharp focus. Careful measurements will help to insure a clear photo. Next, set the diaphragm at about f .16. This will increase the sharpness and depth of field, bringing the entire contents of the window into focus. Then expose.

10. Make several exposures.

11. Avoid vibrations.

12. Send roll or pack to photo finisher promptly.

13. When finished ask your photo finisher's advice about the choice of the best negative of the lot.

14. When this has been selected, have an enlargement (preferably 8 in. x 10 in.) made, finished with a glossy surface.

15. Send the enlargement to the Secretary of your State Association before November 15, 1940.

The Committee on National Pharmacy Week is indebted to George Bender for the help in preparing these rules for taking a picture of a Pharmacy Week window.

Pharmacy, a Profession of Service

By HOWARD W. HAGGARD, M.D.,

Associate Professor of Physiology, Yale University

This article may be used as a basis for Pharmacy Week radio messages, addresses before civic clubs and newspaper publicity. It was originally delivered by Dr. Haggard in his famous series of radio talks on Devils, Drugs and Doctors.

TO-MORROW is the opening day of National Pharmacy Week—the sixteenth annual observance of a custom which started in this country but which has now become international.

And so, I want to pay a tribute to-night—a sincere tribute to the followers of the oldest branch of the medical profession. And yet it is hardly a branch; rather it is the root from which all medical science has sprung and grown. I refer to the profession of pharmacy. My tribute is to the pharmacists of America.

The greatest tribute that can ever be paid to this honored profession lies in its own history. The record of its achievements is one that few professions can approach; it is a record of fundamental contributions to human welfare and human progress. There are few institutions that have a longer history than pharmacy, few that have a more romantic and thrilling one, and none that has a record of greater devotion and service to the needs of mankind.

The pharmacist of to-day carries on a tradition that arose from religion; his code of professional ethics is a theology binding upon him and jealously guarded by him. His conception of service his conception of a duty to sacrifice self to the needs of others could have arisen from no other source than religion. And we find it so when we go back to the beginning of pharmacy. And that beginning is in those early days, dim now in the mist of antiquity, when the land upon which ancient Rome was to rise was a wilderness, before Greece was a nation, long before the first pyramid was built, and when civilization had hardly yet begun. In those ancient, ancient times medicine was pharmacy and pharmacy was religion.

A Profession That Arose from Religion.—By the men who lived then it was believed that all misfortunes that befell them arose from the influence exerted upon them and their surroundings by spirits—ghosts, malign beings that wished them

evil and brought them evil. The priests of their primitive religion attempted to propitiate the spirits or frighten them away and so to prevent or remedy misfortune.

Disease was one of man's misfortunes, caused, they believed, like all others by evil spirits that had taken possession of his body—possessed him. Since disease was a spiritual matter, it was only logical that the priests should be the ones who gave their services to treating disease. To this end, one of their methods was to make the man's body and his surroundings as unpleasant as possible for the spirits that tormented him with disease and suffering, thus hoping to drive them away. They performed mysterious rites over him, made a noise to frighten off the spirits, and administered to the sufferer herbs and roots and berries as unpleasant as possible in order to make his body distasteful to the spirits that inhabited it.

Now among these herbs and roots applied for spiritual reasons some few had an unexpectedly great efficiency in the relief of suffering. By chance these priests had stumbled upon true remedial herbs. But they interpreted their action as frightening off the demons of pain and bringing a blessed respite from suffering. By the same logic others drove out the demons of insomnia and let the goddess of sleep have her sway; still others, when applied to wounds, kept out the evil spirits that festered the flesh and prevented healing. However erroneous their beliefs, the priests of this primitive religion were quick to note and to record in their tradition the benefits of the remedies that chance had put into their hands.

The priests prepared these remedies and applied them. They devoted their lives to the service of their afflicted fellow men. They were the first pharmacists. It is from them down through the ages that pharmacy has come, carrying with it inseparably a tradition of service freely given and a code of ethics jealously preserved. Pharmacy has grown now into a science of wide usefulness but its aims, its duties and its principles have remained unaltered throughout the centuries.

The pharmacists of to-day, safeguarded by laws and regulations advocated by their own

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ethics, occupy in our midst a position of minor priesthood. Whether or not we are conscious of this fact, we nevertheless accept them as such—and our faith in them is not misplaced.

Devotion to an Ancient Tradition.—Pharmacy has never deviated from the ancient tradition of its purpose—to prepare and compound the medicaments which prevent, control, and cure disease and relieve suffering. But from time to time some of its attributes have grown into uses other than those specified in its tradition, important commercial uses. One of the most striking features of its history is the way it has given birth to other sciences. Pharmacy is the mother of botany; it is the mother of chemistry. These children of pharmacy, long since separated from the mother science, have launched out on careers for themselves. Oftentimes, as is the way with children, they have forgotten the debt to their mother, pharmacy. The pharmacists ask no share in their success; they ask merely just recognition of the fact that theirs is a profession from which have grown some of the great sciences upon which we depend for our material civilization.

Chemistry, that science that has done and is doing so much for our wealth and comfort—we live in the chemical age—is an offshoot from pharmacy. Chemistry grew out of alchemy and alchemy, with its search for the elixir of life and the philosopher's stone that would transmute base metals into gold, grew out of pharmacy. It was born in the back room of an apothecary's shop but separated from pharmacy when it grew to disregard the ancient professional tradition and ethics from which pharmacy has never deviated.

A World-Famous Pharmacist.—Here is a story that brings the point more nearly to our own time. It is an incident from the life of a pharmacist who lived a hundred and fifty years ago, but who in his ideas of professional service was just such a pharmacist as you have in your own neighborhood drug store. He spent his life in a Swedish apothecary shop. He compounded prescriptions, but he did more than that. He did what your own pharmacist does freely as part of his duty in a profession of service: he shared without recompense the information in matters of public health that he had acquired from years of study. He gave his time freely to anyone who came to his shop. No other profession, except it be religion, imposes such a duty of service upon its members.

This Swedish pharmacist's name was Carl Scheele. He bequeathed to the world great dis-

coveries made in his apothecary shop, and he gave them as freely as the service rendered across the counters to his patrons. In his Swedish town he was respected and beloved. When the widow who owned the shop where he worked decided to close the establishment, the people of the neighborhood offered to open for him a shop of his own. Their trust was a sincere tribute to the pharmacist, for it was solely as a pharmacist that these people knew him. They did not recognize that he was a man destined to become a world figure in science. Nor was such fame sought by Carl Scheele; his life was devoted to pharmacy and service to his community.

In his spare time, the moments when there were no prescriptions to fill, when there was no one waiting at the counter to seek his advice, and when the shop lights had been put out for the night, he worked to satisfy his own insatiable curiosity concerning the properties of the materials with which he dealt.

Industry Revolutionized by Discoveries in Pharmacy.—He performed experiments, and from them came astonishing discoveries. One day he heated together a certain powdered mineral and an acid; he observed that a greenish yellow gas was evolved. He collected some of this gas in a bladder. The fumes made him cough and nearly blinded him. He had discovered the gas *chlorine*.

From this discovery there came a revolution in the bleaching industry. Instead of soaking cloth in sour milk and boiling lye and exposing it to the sun for weeks or months, it could be bleached in a few hours in the new gas that Carl Scheele, the pharmacist, had discovered. The water which your city supplies to you is most probably made safe and free from any source of infection by this same chlorine gas. But these are matters aside from the profession of pharmacy and so they and the millions of dollars they represent have passed into other hands. Scheele did not profit from his discoveries except in fame. The last days of his life were spent in an apothecary shop.

Carl Scheele discovered among many things the substance *glycerine*. He was led to this discovery by observing a then unknown oily liquid which separated from the materials he used in preparing a healing plaster. His scientific curiosity led him to seek its source; he was soon able to make glycerine from vegetable oils. His discovery has added millions to the chemical industry, for this glycerine is now a very valuable by-product in the commercial manufacture of soap. So valu-

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able, in fact, have Scheele's discoveries been to industrial chemistry that chemists have adopted him as one of them; they have forgotten that he was first and last a pharmacist and that his discoveries were made during the preparation of pharmaceutical products.

Can you wonder, then, that the pharmacists felt that the profession in which they have a strong and just pride was slighted, and unfairly so, when in 1929, the sesquicentennial of Scheele's discovery of glycerine, an association representing a great division of industrial chemistry sent a congratulatory message to Crown Prince Adolph of Sweden, acknowledging a debt to Scheele? For in so doing it had presumed he was a chemist and had made no acknowledgment of the fact that he was a pharmacist or that glycerine was discovered as a side issue to the filling of a prescription.

It is with this same feeling of pride in profession, a desire for just recognition of their achievements, that the pharmacists now devote a week each year, National Pharmacy Week, in the interest of a better and wider understanding of their profession, their aims, their ambitions and the service that they render to public welfare and public health.

A Penalty for Service Freely Given.—This very service that the pharmacists render the people of America has tended to obscure their high professional standing. We look upon the pharmacist and the pharmacy in a light different from that of any other profession or institution. We have grown to expect, until we now accept as our right, a service in a drug store that we do not ask or expect from any other institution. We look upon the pharmacist as a public servant. How many times have you passed by all other places to ask a question, obtain a service of obligation from a pharmacist? He does not fence himself about with formal pretensions that cultivate a sense of professional aloofness; he meets you at all times at his counter ready and eager to render to you his service even though it be service at a loss to him; he stocks his shelves with many things far removed from medicine not alone because of economic pressure but because of your demands for this added service. A public servant, even when the duty is self-imposed, is at a disadvantage in a democratic country. Familiarity that grows from a sense of possession—the feeling that the pharmacist and his shop are yours to command—has given rise in the minds of some people to the idea that the pharmacist is only a semi-profes-

sional man. And that idea the pharmacists quite naturally resent.

You who accept freely the service that the pharmacist renders to you sometimes forget that he is a trained man, with pride of profession, one who in college has studied exhaustively in chemistry, toxicology, physiology, Latin and many other subjects far removed from the mere technique of mixing medicaments. In addition to his college training, each pharmacist serves an apprenticeship in practical experience and finally undergoes a very rigorous state examination. Then and then only does the state proclaim him qualified to prepare medicaments and dispense.

It is the pharmacists themselves who have been instrumental in bringing about these exceptionally high qualifications and requirements for entrance into their profession. And why have they done so? Because pharmacy is not merely the mixing of drugs, the following of a recipe written by a physician. The pharmacist stands as a safeguard to your health and life. The pharmacist must know the purity of every ingredient he uses; to this end he has been one of our strongest forces in bringing about the laws governing the purity of foods and drugs. He must know the action on the body of each medicament that he dispenses. He must assure himself that the amounts prescribed by the physician are the correct ones. Legally and morally he shares a responsibility as great as the physician's. He must not fail the public; your very lives are in his hands. It is to meet this requirement and to prevent any blot upon a cherished profession that the pharmacists themselves have advocated the laws imposing a high standard of education for entrance to their profession.

The pharmacist does not fail the trust imposed upon him. He has the confidence of the public. But he is entitled also to a public recognition of the high professional standing and dignity of his calling. And so the pharmacists take the opportunity this week—National Pharmacy Week—to demonstrate to you some of the things that their profession represents.

A Just Tribute to an Honored Profession.—My tribute here to the pharmacists of America and to the ancient and honored profession of pharmacy is one of words only, words sincerely spoken. But let your tribute be one of acts. You have accepted freely the service that pharmacy extends to you; in return, is it not just that you devote a few minutes to becoming better acquainted with the

profession of your pharmacist? Examine the displays and exhibits prepared for your inspection during National Pharmacy Week. You will understand then why it is so important that only pharmacists who have had years of specialized

education and practical training shall be in a position to serve you in a capacity upon which health and even life may depend. Pay your tribute to the profession of pharmacy and to its priests, the pharmacists of America.

N. A. B. P. Census of Pharmacy

DURING the school year 1939-1940, 8762 students were enrolled in sixty-eight colleges of pharmacy as compared with a total of 8569 for the year previous, according to the annual student census just completed by the National Association of Boards of Pharmacy.

This is the second consecutive year that there has been an increase in the total enrollment. The 1938 figure was 8190 students, showing a gain of almost 600 in two years. The steady increase in college enrollment year by year, although small, is encouraging to those who have worried about the possibility of a shortage of pharmacists in the future. It shows that the four-year course of pharmacy is gaining recognition from prospective students.

The number of seniors graduating, however, was only 1533 as compared with 1842 the previous year. Most of this year's graduating class matriculated in 1936, and as the freshman enrollment for that year was less than that of 1935, a decrease in the number graduating was expected. By the same token, we may expect a larger class to graduate next year, as the 1937 freshman class showed about one hundred more students than the 1936 class.

The new students matriculating in 1940 totaled 3227 but as 128 of these were transfers from other pharmacy colleges, the net gain was 3099. The 1939 new student count was 2920.

On the basis of a freshman count (for 64 colleges) of 2363 in 1936 and a graduation class of 1533 this year (from 68 colleges) we find that the "drop-out" percentage was approximately 46%.

Board Statistics

The registration statistics collected from the boards are equally interesting. Returns from 45 states show that 2271 pharmacists were registered by examination during 1939. (In a few instances, the period covered is the fiscal year of the board instead of the calendar year.) On this basis, the total registrations for the United States should be approximately 2500 and this means that

the estimated $2\frac{1}{2}\%$ replacement figure has been met.

The total number taking the Registered Pharmacist examination in these 45 states was 3648. Therefore the passing percentage on board examinations for the country as a whole was about 62%, which is low. However, it should be remembered that the period covered was one during which some five or six states were still examining large classes of non-graduates, and the passing percentage in these states of from 20% to 40%, coupled with the fact that the numbers of candidates were large, has done considerable to lower the average for the country as a whole. In the majority of the states on a college basis, the passing percentage ran from 70% to 100%. That the number of non-graduates still taking examinations was considerable is evidenced also by the fact that the total number taking examination was 3648 whereas the graduating class of the period (1939) was 1842. Naturally some allowance must also be made for graduates who failed in previous years and were retaking the board examination.

The examination statistics also show that 355 new names were added to the roster of assistant pharmacists in eleven states. A count of the total number of assistant licenses still outstanding shows this number to be 4512 in 29 states. These licenses are still being renewed, in some instances, although the state no longer offers the assistant examination. The following states show an appreciable number of assistant certificates: Illinois 981; Colorado 497; Pennsylvania 476; Connecticut 426; Massachusetts 414; and Wisconsin 353.

The total number of registered pharmacists on the active roster in 45 states and Alaska is 112,055. This figure includes duplications, however, as some pharmacists pay renewal fees in two or more states. For example, the reciprocal registrant usually keeps his original examination license in good standing so as to be able to use it in the future for further reciprocity.

H. C. CHRISTENSEN, *Secretary*, N. A. B. P.

Why the Sale of Drugs Is Regulated

During National Pharmacy Week it is well to emphasize the necessity for complete professional control of the flow of drugs, medicines and poisons from producer to consumer. In this article, which is abstracted from a discourse on the subject appearing in the *New Jersey Grocer*, the important arguments in favor of such control are outlined.

By ROBERT P. FISCHER

Secretary and Chief Chemist, New Jersey Board of Pharmacy

THE Pharmacy laws, as well as the Food, Drug and Cosmetic laws, the Weights and Measures laws, the Narcotic laws (both federal and state), place certain responsibilities on pharmacists which are not assigned to any other group of individuals who engage in retail trade. It is for this reason that the various states have laid down a definite program of education and licensure for those who wish to go into this field of activity.

The privileges assigned to the registered pharmacists of the various states are granted only after a lengthy and expensive period of training. It is estimated that the investment of a pharmacist in his professional training amounts to from \$3000 to \$4000, and this represents only the actual money involved for tuition fees and expenses, and does not take into consideration the time of the individual and the service he renders during his period of training.

What has all this to do with the legal restrictions that have been placed around the sale of drugs, medicines and poisons? Is it true that legislatures have created a monopoly for pharmacists, and is it true that it is the desire of pharmacists to interfere with and encroach upon the sale of general merchandise to a greater and greater extent and thus compete with the business of tradesmen, such as grocers, hardware men and others?

To answer these questions fairly and with an understanding of the best interests of the citizen in mind it is necessary to take a broad view of the problem and to consider the public health and welfare dispassionately and without reference to the economic welfare of any particular group of persons.

It is quite generally recognized that the average citizen is not competent to judge the potential dangers associated with the handling of certain chemicals and the consumption of certain substances known as drugs. There has been great carelessness on the part of manufacturers and dis-

tributors of poisons in the matter of labeling. Take such a simple and common grocery store commodity as lye, for example. It is a violent poison when taken internally, and it can do great damage when applied externally. Many a child has died from the inadvertent and careless use of lye. Yet this violent poison has its proper sphere of usefulness, and when people know how to use it to open clogged drain pipes or in the manufacture of soap, they can employ it without doing any harm.

State Law Requirements

State pharmacy laws require that the purchaser shall be properly informed of the potential dangers of this product by adequate labeling. The container should prominently indicate that the product is a poison. This is accomplished by the use of a red label bearing the word "poison" and usually the skull and crossbones. The label should bear an antidote, and by all means it should bear the name and address of the seller. This means the individual who sells to the ultimate consumer—not to the retailer. It is not sufficient to simply have the name and address of the manufacturer on the label. The reason for this provision in the law is to enable authorities to trace the origin of the sale, when necessary. These are simple requirements in the interest of the public safety, and there certainly should be no objection on the part of those who make sales of such a violent poison to comply with these requirements.

It has always seemed to us that grocers have been greatly misled with respect to the provisions of the Pharmacy Act by salesmen who are either misinformed themselves or deliberately misinform their customers in order to make sales.

The provisions of the pharmacy laws with respect to the sale of drugs are specific. These laws require that all drugs and medicines be sold

only under the supervision of a registered pharmacist, and then they exempt from these provisions so-called non-poisonous patent or proprietary preparations which do not contain hypnotic, narcotic or dangerous drugs.

A drug is defined under the Food, Drug and Cosmetic laws as any substance used or intended for use in the diagnosis, cure, mitigation, prevention or treatment of diseases in man or animal. Obviously, this covers a wide range and may take in products which are sometimes on the borderline. However, it is a very simple matter to distinguish between a product sold as a drug and the same or similar products sold as something else. If it is sold as a drug, it must be labeled with adequate directions for use, dose and other information calculated to inform the buyer of its usefulness and limitations.

U. S. P. "Salt" and Cooking "Salt" are Different

Sodium chloride to be used for making "normal salt solution" employed for medicinal purposes such as injection into the veins, or for nasal douching, must obviously be a pure form of sodium chloride, and there must be information as to the quantity to be used to prepare what is known as a "normal salt solution." Sodium chloride in this form is a drug and must be sold under the supervision of a registered pharmacist. Table salt, which is also largely sodium chloride, is an entirely different commodity. It is not required to meet certain tests for purity, such as are required of the sodium chloride used as a drug. Table salt is used in the preparation of food. No one would think of restricting the sale of table salt under the provisions of a pharmacy act or any other law, and table salt is not a pure sodium chloride. It is usually mixed with some other material and it is not labeled for use as a drug. The line of demarcation between a chemical substance used as a drug and the same substance used for other purposes is clear, and under the labeling requirements of the new Food, Drug and Cosmetic Act there should never be any question as to when a chemical substance is a drug and when it is something else.

We are often asked what difference it would make whether a box of aspirin were sold by a pharmacist or by a grocer, and the answer to this question should clear up considerable of the misunderstanding that exists between grocers and pharmacists, for it is our experience that the average retail grocer is not only a law-abiding

citizen but one who has the interest of his fellow men, and particularly the interest of his customers, at heart. We find on the market a variety of tablets labeled "Aspirin" or with variations of the word "aspirin" which have been purchased in a large variety of stores, including grocery stores, under the assumption that they were aspirin. The retail grocer ordered aspirin tablets from his supply house, and the customer asked the retail grocer for aspirin, and both the customer and the grocer were under the impression that aspirin was being sold. As a matter of fact, these aspirin tablets were only partly aspirin and consisted, in addition, of such potent drugs as acetophenetidin, phenolphthalein and other drugs. If this information was revealed on the label or on the card, or on the bag in which these tablets were supplied, it was revealed in such small type that the average person would miss it entirely.

The aspirin tablets which contained acetophenetidin might prove very harmful to a person who should not be taking the latter drug, because of a heart condition or for other reasons. The aspirin tablets containing phenolphthalein provided a laxative action every time an aspirin tablet was taken, so that the individual who might be accustomed to taking several aspirin tablets daily was also taking a laxative that many times a day, and probably wondered why the effect of the aspirin bought from the grocer was so different from the effect of the aspirin bought from the pharmacist.

Pharmacists Trained to Read Labels

We are all supposed to read labels, but general merchants are not trained in the field of pharmacy and are not required to be experts on drugs. Hence they are not in a position to distinguish between aspirin compounds and plain aspirin. Furthermore, the average citizen who buys drugs for self-medication usually asks the seller about dosage and the use of drugs for children, and other questions which the average grocer is simply not competent to answer.

The states specifically license a group of persons known as Registered Pharmacists to provide this service and information. If that were not necessary, the states would not arrange to license them and set the high requirements promulgated for such licensure.

If you buy drugs for self-medication to-day from wholesale or retail pharmaceutical sources, you will be interested in the statements on the labels of these drugs. You will find such warnings as

In addition to her fondness for science courses, she developed a latent natural talent in art while in these schools. This talent has attracted considerable attention through her work in preparing charts for use in teaching in the biological sciences.

Basketball has been Miss Jacobs' choice for an athletic activity and, as in her other activities, she

has excelled in this. Her chosen vocation is hospital pharmacy in which she is at present engaged at the Boston Children's Hospital. She plans to continue her studies as a graduate student at the Massachusetts College of Pharmacy during the present session in preparation for a career in this specialized field of pharmacy.

The Business of Publishing Pharmaceutical Books^{*}

By WILLIAM E. KIRSCH†

No discussion of the publishing of books for the pharmaceutical profession could be conducted without a brief comparison with the publishing of books in the two allied professions—medicine and dentistry. Roughly speaking, the physicians in this country number about 165,000, the dentists 90,000 and the pharmacists 75,000. It is natural that most scientific and specializing publishers would concentrate mainly on the medical profession, both in textbooks and in books for graduates. Of the 338 new books published in the medical, dental and pharmaceutical field in 1937, not more than 10 could be classified as being entirely in the pharmacy field. When one considers the ratio of books published in the various fields to the number of members, it is immediately apparent that the number of books published for the pharmacist falls far below the ratio of those published for the medical or dental groups.

There appear to be several reasons from the publisher's angle for this discrepancy. First, the pharmacy schools have only comparatively recently put into effect the four-year course. It will still take some time before the curriculum achieves a degree of standardization—enough, at least, so that the publisher of pharmacy texts will know that the books he publishes will fit into 30% or more of the schools and will not be used only in the author's school and one or two others. It will take some time, too, before the elective courses have had an opportunity to adjust themselves in degree of popularity with the students.

When comparing the school groups, it is evident that the pharmacy student is not nearly as well off financially as his cousins in the dental and medical schools. In the latter schools, funds are nearly

always made available by relatives, and resort to outside work for assistance is rare, whereas the pharmacy student all too frequently must, of economic necessity, seek part-time work if he wishes to complete his course. The item of books, therefore, is a major item to the pharmacy student and a \$30 to \$40 a year budget for books often is a hardship. The medical and dental student, on the other hand, frequently buys \$90 to \$100 worth of books a year. Obviously the pharmacy student does not present the same sales possibilities to the publisher under these circumstances.

Then, too, in the medical and dental schools, emphasis is placed early on the necessity of building up a reference library. Standard books such as anatomies, pathologies, histologies and textbooks of medicine are always of value to the medical student in future years. The textbooks used in the pharmacy schools, on the other hand, get out of date much more quickly, and are not nearly as valuable for reference in future years as those used in basic medical subjects. Hence, the pharmacy student is more content to purchase a second-hand text and, after he is through with it, pass it on to a member of the succeeding class. These factors, combined with the fact that the pharmacy schools are smaller and fewer in number than the medical schools, have caused the publishers to proceed very cautiously into the field of pharmacy texts.

In the field of professional men, the reason for lack of pharmaceutical books is even more obvious. In the first place, once the pharmacist is established in a place of business, by far the greater portion of his time is devoted to business and commercial aspects not connected with professional and scientific problems. Possession of the U. S. P., N. F. and perhaps a few (very few) other books gives him all the professional library he feels to be necessary. He feels it is no longer necessary for him to get new books on chemistry, pharmacology, therapeutics, and so on. Since he has no reception room for patients he does not need to fill bookshelves with

^{*} Presented before the Section on Practical Pharmacy and Dispensing, A. Ph. A., Atlanta meeting, 1939.

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impressive-looking books. Consequently, the number of books purchased by the pharmacist, outside of those required by law and old standbys that are revised only once in a decade, is indeed very small.

The amount of revenue coming from professional services of the pharmacist when compared to that obtained by the physician and the dentist hardly justifies a great expenditure for a reference library, but from a standpoint of professional standing and keeping his interest in his profession, the pharmacist could well profit by paying a little more attention to this item.

The Future Prospect

The above are, in brief, the reasons for the seeming lack of books in the pharmacy field at the present time. The future presents a much brighter picture both from the publisher's viewpoint and from those interested in the field of pharmacy.

The Pharmacy Curriculum is gradually becoming more standardized in many subjects. There is more uniformity of thought as to what material should be covered. Once publishers are assured of a market for books designed for pharmacy-student use, suitable texts will be made available. They will not be the expensive cumbersome texts containing hundreds of pages of irrelevant and superfluous material now in the market. They will be texts of suitable size, moderate price, and will be designed for the student of pharmacy, not for the specialist in one of the subjects.

In the electives, many of which now suffer because of the lack of a suitable text, the publishers can aid the pharmacy schools by pioneering the field and helping to popularize many of these subjects with the students. Although not as lucrative a field as the basic subjects, the elective field deserves deep consideration by the publisher who is interested in the development of pharmacy.

Another factor that is helping the publisher is the growing realization among pharmacy educators that suitable texts are a vital factor in preparation of the student. No longer are the leaders depending on a few men to provide all the books. The pressure of the curriculum has brought to mind the lack of suitable texts. We, in the publishing field, hear the demands for new books in many subjects, and, what is still better, the men who formerly were unconcerned are now willing to write them. I would like to say here that these men are willing to write these books, not because of any personal fame or remuneration that may come to them, but because they have the interest of pharmacy at heart and realize that in order to have good students and good teachers, one must have good books. Such an attitude will undoubtedly result in a higher caliber of suitable texts for the pharmacy student.

The practicing pharmacist, I am sure, will also benefit from a renewed interest in the field. The standard books of the past are undergoing more frequent revision and together with supplements they try to keep pace with modern advances and problems. The lack of books dealing with the pharmacist's business is pressing. The pharmacist needs books to help him in those matters. Books dealing with the management side of pharmacy are surely forthcoming. No alert pharmacist will refuse to build up a reference library if he finds that in it he can find daily helps that make him a better pharmacist or a successful owner of a pharmacy.

The publishers of books have a solemn obligation to the pharmaceutical profession. They must have the interest of the student and the practitioner constantly in mind. No book in the field has yet been a success unless it has contributed something. The standard of books in this profession, just as in the medical and dental groups, must be at a high plane. Sympathy with the pharmacist in his educational aims and in his desire to maintain his position in the professional world is necessary. Although never taking part professionally in the development of pharmacy, the publishers are nevertheless completely a part of the group and, as such, participation in all phases of pharmaceutical education, problems of government and all future plans is necessary.

Codeine Addiction

The pharmacological effects of codeine are of the same nature but of a lower order than morphine in all of its characteristics, according to the authors of "Studies on Codeine Addiction," published by the U. S. Public Health Service.* The reduction in addiction liability, according to these authors, although considerable, has not reached the point where this drug can be used liberally or indiscriminately over protracted periods. Studies on tuberculous patients indicate that codeine is commonly employed in very liberal amounts against cough. Attention has been called to the waste and inherent dangers in such practice. The authors conclude their report of researches on the subject by paraphrasing a statement by Abraham Lincoln as follows: "Codeine addition does not result from the use of a bad thing but from the abuse of a very good thing."

You can remove green grass stains from flannels by applying a mixture of equal portions of egg white and glycerine. Wash in the usual manner after an hour or two.

* Supplement No. 158 to the *Public Health Reports*.

IN THE NEWS

Max N. Lemberger, chairman of the Inter-Professional Committee of the Wisconsin Pharmaceutical Association, has been appointed by Dean Wm. S. Middleton as Associate Preceptor of the University of Wisconsin Medical School. Mr. Lemberger's duty will be to teach senior medical students pharmaceutical practices. Classes will be held weekly at Mr. Lemberger's pharmacy.

The Federal Wholesale Druggists Association celebrated its twenty-fifth birthday at its annual convention at Hot Springs, Va., September 8th to 11th. Thurman W. Arnold, Assistant Attorney-General of the United States, was one of the speakers.

The Food and Drug Administration will hold a hearing on Vitamin Standards beginning October 7th. Later this year the Administration will probably announce a hearing on proposed regulations under section 502 (h) of the new law, relating to drugs liable to deterioration with age.

The Conference of State Pharmaceutical Association Secretaries held its usual meeting during the convention of the National Association of Retail Druggists in New York City, the week of September 23rd. Many important topics were discussed.

Dr. Karl L. Kaufman, of Pullman, Wash., has been chosen to succeed Dr. J. A. Reese at the Medical College of Virginia, School of Pharmacy. He is a native of Ohio, having received his B.S. in pharmacy at the State University. Later he was awarded the Ph.D. degree at Purdue University. For the past four years he has taught pharmacy and pharmacognosy at Washington State College. Dr. Reese was recently appointed Dean of the College of Pharmacy at the University of Kansas.

Drs. Madeline O. Holland and John N. McDonnell, the latter editor of the *American Professional Pharmacist* and assistant professor in pharmacy, at the Philadelphia College of Pharmacy, have announced their engagement. Both are graduates of the Philadelphia College of Pharmacy and Science.

Dr. Fritz O. Laquer, internationally known scientist, has joined the faculty of the School of Pharmacy of Temple University, Philadelphia, as Research

Professor of Bio-Chemistry. Dr. Laquer comes to Temple directly from Venezuela, S. A., where he has been engaged in a scientific mission for the Venezuelan government.

Pasteur Valery Radot, grandson of the great scientist, Pasteur, has just been appointed head of the merged societies of the French Red Cross. Mr. Radot, who is an author, puts the needs of France for the severe winter which is predicted as, first, blankets, then food, and especially condensed milk, then clothing and donation of funds.

The American Chemical Society met for the 100th time in Detroit, Mich., September 9th to 13th. Progress in the manufacture of synthetic rubber and rubber substitutes was reported in several papers. The second women's award in chemistry, the Francis P. Garvan Gold Medal, was presented to Dr. Mary Engle Pennington of New York City, who was chosen as the leading woman chemist of 1940; Dr. Lawrence Olin Brockway, of Ann Arbor, Mich., received the \$1000 prize as the outstanding young American chemist.

The Smithsonian Institution will receive the bulk of the estate of Mrs. Mary Vaux Walcott, widow of the head of the institution, Charles D. Walcott. The amount of the estate is estimated as \$336,000. This money will be devoted to the Charles D. and Mary Walcott Research Fund established by Mr. Walcott to further research in paleontology and geology.

President Charles Hall Evans has purchased an island at St. Simons, Ga., on which he will build a home suitable for rest and relaxation. It will be called "Evansisle."

Dr. R. L. Swain, editor of *Drug Topics*, is scheduled to be the principal speaker at the 16th annual observance of National Pharmacy Week by the Yonkers Pharmaceutical Association. The celebration will be in the nature of a dinner and entertainment.

Turner F. Currens, who retired on September first as vice-president and eastern division sales manager for Norwich Pharmacal Co., Norwich, N. Y., was honored at a testimonial dinner on September 19th, at the Hotel Pennsylvania,

New York City. The affair was arranged by his friends under the auspices of the Drug, Chemical and Allied Trades Section of the New York Board of Trade. He will continue as a director of the company. Guy L. Marsters will assume the sales duties relinquished by Mr. Currens.

Homer Adkins, of Arkansas, formerly a pharmacist in Little Rock, is now running for governor. He has been sheriff and collector in Little Rock, and recently was U. S. Collector of Internal Revenue. Two other state governors are pharmacists—Robert Jones of Arizona and Lewis O. Barrows of Maine.

The New York Academy of Medicine is showing an exhibit of books on the historical aspects of military medicine. The display begins with one of the earliest records of gunshot wounds and continues up to an account of gas warfare. Rare books in the academy's library are included. The exhibit was arranged by the librarian, Dr. T. A. Malloch, and his staff, as a part of the profession's preparedness plan.

Ceylon will be the location of a quinine factory, according to advices received by the Department of Commerce from the American Consul in Colombo. An attempt is being made to make the Empire self-supporting in this respect. A botanist will shortly visit plantations in India and Java to study problems in connection with cinchona cultivation and will then make experiments in Ceylon with several types.

American soldiers, it is reported, will be provided with sulfanilamide tablets as a part of their emergency equipment to prevent wound infections.

AROUND THE STATES

ILLINOIS

Bernard Fantus Memorial.—Plans are under way to place a plaque in the new outpatient clinic building at Cook County Hospital, at Chicago, Ill., in honor of the late Dr. Bernard Fantus, for whom the clinic building was named. Those who wish to contribute to this memorial may send their checks to the Bernard Fantus Memorial Fund, care of Elizabeth M. Adles, Department of Therapeutics, Cook County Hospital, 1825 W. Harrison St., Chicago.

MINNESOTA

Board of Health Appointment.—Prof. Gustave Bachman, University of Minnesota, has been reappointed by Governor Stassen to serve on the State Board of Health. He was first appointed in 1937, and was the first pharmacist to serve in that capacity. *The importance of pharmacy in public health* is being recognized to a greater extent throughout the states.

Board of Pharmacy Appointment.—Norman French of Lakefield, Minn., has been appointed to the State Board of Pharmacy by Governor Stassen to succeed Frank W. Moudry, who resigned to become secretary of the Board. This brings the Board up to full membership. Mr. French was graduated from the University of Minnesota in 1929 and purchased his own store in Lakefield in 1933.

PENNSYLVANIA

U. of P. Bicentennial.—The University of Pennsylvania celebrated its bicentennial during the week of September 16th with convocations and conferences including symposia on the fine arts, humanities, medical sciences, natural sciences, religion and social sciences. Honorary degrees were conferred upon President Roosevelt, former President Hoover and other outstanding figures in the world of science, education and culture. The symposia in the medical sciences included: "Problems and Trends in Virus Research;" "Therapeutic Advances in Psychiatry;" "Medical Problems of Old Age;" "Nutrition;" "Female Sex Hormones;" "Hypertension;" "Cancer;" "Dental Caries;" "Development of Occlusion;" "Problems of Intestinal Obstruction;" "Relation of Diseases in Lower Animals to Human Welfare;" "Chemotherapy;" "Tuberculosis," and "Public Health Statesmanship."

OBITUARY

Paul L. Hess

Paul L. Hess, of Kansas City, Mo., died on August 13, 1940, after several days' illness, aged seventy-five years. Death occurred in Granby, Colo.

Mr. Hess had lived in Kansas City for sixty years, operating a pharmacy for many of them. Formerly he had been president of the Research Hospital and since February had been its treasurer. Surviving the deceased are his wife, Mrs. Rose Dierks Hess; a son, Paul D. Hess; and a sister, Miss Ida Hess, a nurse at the Research Hospital.

He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911.

EDITORIAL

Pharmacy and the National Defense

Several developments of great importance to pharmacy have occurred in connection with the national defense since the September issue of this publication appeared. First and foremost, regulations were completed and announced for the enforcement of the Selective Service and Training Act. Volumes one, two and three, of the six volumes issued are of direct interest to pharmacists and copies of them were sent promptly by the A. Ph. A. office, to the secretaries of state pharmaceutical associations and to the deans of schools and colleges of pharmacy.

Of particular interest to the profession are the provisions deferring the training and service of students of pharmacy in order that the necessary supply of new pharmacists may not be interrupted and deferring the training and service of those pharmacists now in practice who may be needed to insure that the pharmaceutical service necessary to protect the health and welfare of the people shall not be interfered with to a greater extent than circumstances demand.

The training and service of those students of pharmacy who may be selected and *who request deferment*, is deferred under the terms of the Act until their academic year is completed or not later than July 1, 1941. Students may be registered and classified where they may be located. This arrangement provides for the emergency and steps are already being taken in coöperation with other professional and scientific organizations to provide for the deferment of the training and service of students after July 1, 1941, on the basis of experience gained in connection with registration and the first selection. This experience will indicate how many students of pharmacy are selected. It

is already evident, however, that pharmaceutical service will be seriously affected if any students of pharmacy are selected since the number graduated in recent years has not been sufficient for necessary replacements in existing pharmacies.

The training and service of pharmacists in practice who may be selected and found to be qualified may be deferred for six months subject to renewal under the following regulation:

"351. 'Necessary man' defined.—A registrant shall be considered a 'necessary man' in industry, business, employment, agricultural pursuit, governmental service, or in any other service or endeavor, including training or preparation therefor, *only when all of these conditions exist:*

"a. He is, or but for a seasonal or temporary interruption would be, engaged in such activity.

"b. He cannot be replaced satisfactorily because of a shortage of persons with his qualifications or skill in such activity.

"c. His removal would cause a material loss of effectiveness in such activity.

"352. Composition of Class II-A.—a. In Class II-A shall be placed any registrant found to be a 'necessary man' in any industry, business, employment, agricultural pursuit, governmental service, or any other service or endeavor, or in training or preparation there for, the maintenance of which is necessary to the national health, safety, or interest in the sense that it is useful or productive and contributes to the employment or well-being of the community or the Nation.

"b. In determining whether a registrant is a 'necessary man,' the local board shall give due consideration to those registrants engaged in any activity which is essential to the national health, safety, or interest in the sense that a serious interruption or delay in such activity is likely to impede the national defense program."

When pharmacists who are selected are required to maintain an adequate service for the community they are serving, applica-

tion for deferment with supporting evidence should be made to the local board. It is not expected that many pharmacists will be selected and found to be otherwise qualified during any given year but it appears that in many localities the removal of even a few pharmacists will further complicate a personnel situation which is already giving the profession concern.

The Joint Committee on the Status of Pharmacists in the Government Services of the AMERICAN PHARMACEUTICAL ASSOCIATION will continue to give close attention to these phases of the Selective Service and Training Act in so far as they affect pharmacists and it is encouraging to learn that pharmacists have accepted appointment as members of many local draft boards.

The enrollment of pharmacists with the American Red Cross for possible service as pharmacy technicians continues to increase. This enrollment plan is primarily for a war emergency but it is understood that those men who enroll and are later selected for service and training will be transferred to the Medical Department and be employed in pharmaceutical duties as technical sergeants.

Although it cannot be predicted how many pharmacists will be selected or will enlist per year, it is planned to segregate them, as is done with other professionals and to employ them in pharmaceutical duties as long as vacancies exist. It is expected that pharmacists will be employed in the purchasing, testing and distribution of drugs, medicines and medical supplies as well as in hospitals and dispensaries but it is impossible, at this time, for the authorities to predict the number required.

It is also expected that pharmacists who are selected and who meet the educational and other requirements will be commissioned in the reserve and that those who qualify will be ordered to active duty for the term of their training and service.

Special legislation looking to the exemption of physicians and dentists, who may be selected, from combat training and requiring them to be employed in duties for which they

were trained, and also exempting students of medicine and dentistry from training and service until after graduation has been introduced in both houses of Congress. Representations have already been made that pharmacists and pharmacy students should be included, in case such legislation is to be considered. In view of the general opposition to exemptions by classes or groups other than those exempted in the Act itself, the enactment of such legislation seems to be doubtful.

Every effort will be made to see that the arrangements outlined above will be carried out successfully and it is evident that pharmacists called to service in the army will be given a better opportunity than has been the case heretofore to serve as pharmacists. This is due, of course, to the greater professional recognition which pharmacy has received in recent years in civil life and the broader education and training which pharmacists now receive before they are licensed.

Pharmacopoeial Affairs

During the month of October the U. S. P. Revision Committee, the Board of Trustees of the U. S. P. Convention and the special committee to consider revision of the constitution and by-laws of the U. S. P. Convention met separately to consider the respective problems with which they are concerned. While no definite information is available at this time as to the accomplishments, it may be noted that pharmacopoeial work is under way and that we may look forward to a fairly early revision of the U. S. P. XI. We may also look forward to issuance of proposed plans for making the U. S. P. Convention more responsive to the progress of medicine and pharmacy and to the thinking of interested pharmacists and physicians.

Another U. S. P. Convention must be held sometime before May 1942 to receive the report of the special committee which is now studying reorganization plans. It

is to be hoped that the U. S. P. XII will have been completed before that time so that work on the U. S. P. XIII can be undertaken under the modified plans which will probably result from the work of the special committee.

The most important immediate task of U. S. P. revision is the completion of the work of the sub-committee on scope, which determines the drugs to be admitted to and deleted from the next pharmacopoeia. Until these decisions have been made the preparation and revision of the various monographs cannot be completed. The personnel of the scope committee is such as to assure admissions and deletions based partly on laboratory proof and partly on clinical evidence of therapeutic efficiency. How much weight data on the extent of use of a drug will carry with the committee remains to be seen.

It would seem advisable for the Committee on Scope to announce the criteria on which decisions to admit or delete drugs are based so that the medical and pharmaceutical professions as a whole may be familiar not only with the final actions but also with bases for such action.

CHRISTMAS SEALS



**Help to Protect Your
Home from Tuberculosis**

Problems and Plans

PREPARATIONS FOR DEFENSE are under way in many departments of the federal, state and municipal governments and have been assumed by various independent organizations. Practically every industry, profession and trade which is organized on a state or national basis has assigned participation in defense matters to one or more committees. The danger of duplication of effort and possible working at cross purposes multiplies as defense agencies are organized and remain uncoordinated. It is, therefore, essential that clearing houses for federal and state defense activities be set up. The federal government has organized the National Defense Council and various states have followed the suggestion of the National Council by setting up State Defense Councils. These State Defense Councils are subdivided into advisory committees covering various fields of activity and among them there is always a division of health and a division of welfare. Sometimes the two are combined. At any rate, pharmacy fits into one or both of these subdivisions and state pharmaceutical associations should arrange to be represented in these subdivisions. In this way coordination of the efforts of individuals and associations working in our field will be achieved, time will be saved and services will be made doubly effective.

THE AMERICAN RED CROSS, in addition to enlisting the services of pharmacists and medical technicians for possible service with the armed forces at a later date, is in a position to accept the services of pharmacists in civilian capacities. Every local chapter of the American Red Cross is expected to survey its local facilities for meeting possible disasters affecting the civil population. Pharmacists throughout the United States should contact their local

Red Cross chapter and acquaint the officers of the chapter with their facilities for aiding those charged with disaster and emergency service. It is only by careful planning under normal conditions that undue excitement and loss of time and possible loss of life can be avoided in times of emergency and stress. This is a form of preparedness which every pharmacist and every pharmaceutical association should contemplate and the proper first step is to contact your local Red Cross chapter.

HOSPITAL PHARMACY is making rapid strides toward the establishment of this subdivision of medical care as a distinct specialty, requiring graduate training and supervised internship for those who would qualify in this important field of pharmaceutical practice. No longer can we expect the pharmaceutical needs of the modern hospital to be met by placing the pharmacy in charge of a "retired" retail druggist or one who has no conception of the modern trends in medication and the economic factors which enter into the supply of drugs to hospitalized or clinic patients. Hospital managements are alert to the savings which a well-trained pharmacist can effect in the budget for drugs and medical supplies. They also realize the lack of adequate standards on the basis of which a hospital pharmacist and a hospital pharmacy may be judged. The standards suggested by the American College of Surgeons furnish an excellent start, but it is necessary for hospital pharmacists to be so well versed in their specialty as to inspire confidence on the part of the medical staff and the hospital management in their complete mastery of this field. Once this is accomplished the hospital pharmacist's position as one of the most important factors in adequate hospital service is secure. Dean Rudd, of the Medical College of Virginia, has performed an excellent service to both hospital managements and pharmacists in pointing out the importance of giving greater

attention to the training for hospital pharmacy in our colleges of pharmacy. The results of his survey of hospital pharmacy education were presented at a session of the Pharmacy Section of the American Hospital Association last month and have served to focus attention on this important subject.

LOWERING STANDARDS OF EDUCATION and standards for professional licensure are among the first suggestions which come from those who can profit thereby whenever there is any suggestion or possibility of a national or local emergency. Thus we already have evidence of activity on the part of cram schools and those who desire the return of the day of cheap registered help, under the guise of planning for war emergencies. Pharmacists everywhere, and particularly state pharmaceutical associations, must combat the insidious propaganda of those who would use possible war emergency to gain their selfish ends. There is no basis for the assertion made in some quarters that the Selective Service Act may deplete the ranks of pharmacists. When the figures are calmly and honestly reviewed for any given state or district, it will be found that the number of pharmacists who will be eligible for military duty and the actual number which will be called for the one year of military training are so small as to present no general problem, although there may be a specific problem in some individual cases. This, however, is true in every walk of life and the suggestion that the term of study in preparation for a pharmaceutical education or the requirements for licensure be reduced, is preposterous. Let us stand fast and meet emergencies as they may arise without sacrificing the standards which have been achieved over a long period and at great effort. No emergency faces us now which requires any lowering of standards of pharmaceutical education or licensure. On the contrary, the times demand the very best and highest professional standards if the public is to be served adequately.

An Urgent Message from President Evans

President Charles Evans, of the A. PH. A., is endeavoring to interest more retail pharmacists in the work of the ASSOCIATION. By visits to State Associations and in his Pharmacy Week Message over the Radio he has reached a large number of pharmacists. Here is another appeal to strengthen our organization. Please read and act.

The response to our membership drive from committee chairmen, state association presidents and secretaries as well as interested members of the A. PH. A. has been most gratifying. I wish to thank each of you and to urge that you continue the good work you have started.

On every side we see indications of the return to the professional side of pharmacy. Much interest is being shown in modernizing the drug business which, after so long a time, is returning to its proper place in the scheme of things.

This much is self-evident: if we are to move forward the thousands of rural and suburban stores must do their part. These stores represent pharmacy as the public knows it. Whatever advance the profession makes must of necessity be reflected through these stores which represent the larger percentage of distribution of drugs, medicines and supplies.

In order that each member of our state associations may send in at least one new application we are printing below an application blank.

On the front cover there is depicted the beautiful reading room which adjoins the growing library at the headquarters building. I wish it might be possible for every person connected with all of the various phases of pharmacy to make a personal visit to the Headquarters Building. There they would be brought in close touch with the many services being rendered by the ASSOCIATION. They could see what membership in the A. PH. A. means. They would come away with a stronger determination to do their part in keeping pharmacy at the top among the Public Health Professions.

If additional blanks are needed please write Dr. E. F. Kelly, Secretary, 2215 Constitution Ave., Washington, D. C.

APPLICATION FOR MEMBERSHIP IN THE

American Pharmaceutical Association

Approving the objects of the American Pharmaceutical Association, I hereby apply for membership in the Association and subscribe for the "Journal of the American Pharmaceutical Association," and enclose \$5.00 as annual membership dues, \$4.00 of which is for a year's subscription to the Journal.

Name in Full.....
(Write or print name in full—Initials are not sufficient)

Number and Street.....

Date..... Town..... State.....

Paid \$..... No.....

This application with the first year's payment of \$5.00 may be sent to the Chairman of the Membership Committee, the Secretary or any officer of the A. Ph. A.

E. F. KELLY, Secretary,
2215 Constitution Ave.,
Washington, D. C.

P. P. E.

The Pharmacist as a Consultant*

By MAX N. LEMBERGER

Not only the physician but also the layman with a private formula and the industrialist with a pharmaceutical problem, frequently consult the pharmacist on specific problems.

THE pharmacist in his community is not only considered as a compounder of orders and prescriptions of physicians and dentists, but also as consultant and adviser on pet formulas presented by his customers, whether these be obtained from newspaper columns, such as Dr. Brady's or Dr. Evans', medicine books, consumers' digest publications or some family traditional recipe used by grandma and grandpa. Such formulas are presented with utmost confidence and are usually considered as being just the preparations needed, and it is therefore natural that they expect their pharmacist, who is in the best position to do so, to help them by supplying the ingredients or advising the procedure in putting them together. Never should a pharmacist refuse this cooperation. If such a formula might be dangerous for administration, he should advise accordingly, also carefully inquire as to use and dosage. It is not good practice to discourage the preparing of such a formula and recommend some proprietary just as good or one similar because the profit might be greater. While the customer at the moment might be receptive to a sales talk, later he will view the whole situation as an offense and an insult to his intelligence; particularly is this true if the anticipated results are not obtained.

Industrial organizations also have many problems particularly those in which employees receive compensation for disability because the material or products which they contact daily in their employment cause skin eruptions or general dermatitis. These problems are not sufficiently extensive to call in large organizations of consulting chemists for solution. The pharmacist, however, as a consultant can be of great value, supplying in many instances lotions or creams which are in the classification of a prophylactic or preventative measure. Never, however, should he suggest a preparation with the thought of providing treatment.

* Presented before the Section on Practical Pharmacy, A. Ph. A., at the Richmond meeting, 1940.

By the way of illustration may I cite some typical instances. In a hosiery mill employees were constantly having difficulty with dermatitis of the hands caused by the strong alkaline solutions with which raw silks are treated. When ordinary lotions or creams were used the hands improved but unfortunately the oils or fats in the ointment bases would be carried over in the fibers of the silk and would appear in the finished product which had to be discarded. This loss was as great as that caused by the inability of the employee to remain at work. On advice of a dermatologist the problem then was given to a pharmacist who solved it by making a base of the vanishing cream type, containing no oil but being protective, also incorporating sufficient acid ingredient to neutralize the strong alkaline base used in the treatment of raw silk. This product was adopted by the manufacturer who made it compulsory for all employees to use this product as a protective cream. The cost of the material has more than offset the loss suffered by disabilities.

Another, with the cooperation of a dermatologist, was a protective cream for painters employed by a manufacturer working with bronze. While this bronze was easily removed with benzol or acetic ether the hands became quite inflamed from the constant use of these removers. A preparation was supplied which these men applied before starting their day's work, and then when it was time to wash, ordinary soap and water were sufficient to remove these bronze stains.

Daily, physicians are confronted with the problem of medications they might use, what vehicle is best suited or whether this or that mixture is compatible. Knowledge of U. S. P. and N. F. products comparable to proprietary products is valuable information and is frequently sought by the busy practitioner. The pharmacist in this position of consultant deserves and merits the cooperation of the physician and experience relates that one so qualified does receive this recognition.

Dispensing physicians usually prefer to dispense preparations that are not commonly prescribed or sold. While this business is much sought by smaller pharmaceutical manufacturers, the advantage of having a pharmacist who can act as both manufacturer and consultant is of inestimable value to such a dispenser and is profitable to the pharmacist.

It has been my endeavor to demonstrate that a pharmacist is recognized as a consultant, much depending, however, upon his ability and integrity and his willingness to assist in such prob-

lems that may be presented to him, whether these come from persons wholly unfamiliar with pharmaceutical preparations or who lack knowledge of pharmacy and chemistry, industrial manufacturers or dispensing physicians.

He should never discredit any formula presented by a customer regardless of what he thinks of the ability of the customer to prepare such product. He will also profit from this coöperation by having the customer present a formula for complete compounding, especially after he has tried in vain to make a presentable preparation.

Pharmacy and Public Relations*

By C. V. SELBY†

THIS paper particularly raises the question: "Why Has Pharmacy as a Whole Kept Its Light under the Bushel?"

When one considers that this profession has endured with trial and tribulation over quite a long span and in a sense enjoyed a fair amount of prestige, you may ask why should we do anything more than we are doing at this time?

The answer to this may be had by stopping any man or woman in the street and asking them if they know the requirements for a young man or woman to practice pharmacy. Ask this same man or woman if they know the requirements for a young man or woman to become a doctor of medicine. The chances are they can tell you all about how long it takes to become a doctor and they will know practically nothing of the requirements for becoming a pharmacist.

Far too long have we had advertisements of various kinds in which some pharmacist or several pharmacists in a town are extolling the virtue of "Whoosis Tonic" and a hundred other things have found a place in the modern drug store so that it really is confusing to the public to know who is and who is not trying to operate a real public health institution.

Contrast the difference of the program sponsored a few weeks ago by the Smithsonian Institution and the U. S. Department of Education known as the "World is Yours," which was

dedicated to American Pharmacy, in which the public was advised of the many really fine health services the pharmacist has to offer, with one of the code hearings when the speaker held up some intimate ladies' wearing apparel and the administrator asked him where he got it and he replied amid plenty of laughter, "in a drug store."

One of the dire needs of pharmacy to-day, at least in my personal opinion, is the education of men in retail pharmacy to pursue methods of educating the general public on the finer things pharmacy has to offer. Pharmacists must be advised of the fact that if pharmacy as a profession is to survive, more and more of them must clean up their places of business and make them worthy of support from the general public and the medical profession. Such effort will bring about a greater public appreciation for pharmacy, make them appreciate the fact that the pharmacist with his education and knowledge, equipment and skill is an important ally of the medical profession, working toward a better health in the communities they serve.

There can be no doubt that such a program is long ranged and its accomplishment will take a long time. A number of the older men in pharmacy will not be interested, but the proper place to start working from is in our colleges of pharmacy. The students should be so impressed with their obligations to pharmacy, their responsibilities to the public, that they, combined with the men already in practice, will create a force so strong that it must be recognized by the gen-

* Presented before the Section on Practical Pharmacy, A. P. H. A., at the Richmond meeting, 1940.

† Clarksburg, W. Va.

eral public as an agency which exemplifies better pharmacy and the services the better pharmacists have to offer to their communities.

Simply as a matter to provoke thought, might we suggest the idea of the AMERICAN PHARMACEUTICAL ASSOCIATION setting up a "Bureau of Information and Education" at the national headquarters, the purpose of which would be to supply information, if not the actual material, which could be used by individual pharmacists for advertising either by newspaper, radio or direct mail. Such a bureau could also supply information and help on pharmaceutical dispensing problems and assist the pharmacist in keeping up to date in compounding methods and the products which are continuously coming along as the result of research. Naturally, such a bureau or service would cost money, but has not pharmacy been trying to do business entirely too long on nothing? A real service, providing something tangible that the pharmacist could really use to promote greater public appreciation and assist him in better dispensing in his pharmacy, could be made available, I am sure, at a price that the better pharmacists of this country would be willing to pay.

The ultimate result would mean better pharmacy. With better pharmacy will come a better appreciation on the part of the public for the services pharmacy has to offer.

Vitamin Brief Filed

The AMERICAN PHARMACEUTICAL ASSOCIATION and the National Association of Retail Druggists, joined in filing a brief with the Food and Drug Administration of the Federal Security Agency in the matter of prescribing label statements concerning dietary properties of food purporting to be or represented for special dietary use under "Section 2.10 (a) General" of the regulations, under Section 403 (j) of the Federal Food, Drug and Cosmetic Act.

The necessity for filing this brief became apparent when the Kroger Grocery and Baking Company filed a brief contending, in effect, that vitamins in any form are always foods and never drugs and that vitamin concentrates are harmless.

The following excerpt from the A. PH. A.-N. A. R. D. brief is of special interest:

The question as to whether any particular product is a drug depends upon

(1) Whether or not it is recognized in the official United States Pharmacopœia, official

Homeopathic Pharmacopœia of the United States or official National Formulary, or any supplement to any of them;

(2) Whether or not it is intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man or other animals;

(3) Whether or not, other than in the case of a food, it is intended to affect the structure or function of the body of man or other animals and

(4) Whether or not it is intended for use as a component of any article specified in clause (1) (2) or (3).

If any particular product falls within this definite classification contained in Chapter 2 of the Federal Act, it must be deemed to be a *drug*, and there is no authority in the Act which permits any deviation from the language contained in Section 201.

In the case of the declaratory judgment granted in the Superior Court of Marion County, Indiana, attention is called to the fact that this case is now on appeal and final adjudication has not yet been had.

It is evident that the Kroger Company is concerned with the possibility that the A-B-D-G vitamin capsules, involved in that case, which are marketed by it, may fall under the definition "drugs" as contained in the Federal Food, Drug and Cosmetic Act.

In this connection we call attention to the fact that the following ailments and diseases were mentioned in the labeling of these capsules: "dull eye, night blindness, dull or falling hair, poor bone structure, soft dentine and enamel, tiredness, irritability, serious deficiency diseases, skin lesion, polynneuritis, dry scaly skin, poor teeth, lowered resistance to colds, improper muscular function, brittle nails, loss of appetite, nervousness, constipation, poor lactation in nursing mothers, beriberi, rickets, tooth decay, nervous depression, skin ailments, loss of tissue tone, possible cataract, an pellagra." The inference follows that the product is *intended* for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man. The being true, we submit that the question as to whether or not the product is a food or a drug is automatically determined by the language of Section 201 (g) of the Federal Act. We submit that such a product as the Kroger A-B-D-G capsules or any similar product for which similar claims are made, are drugs and could not under any circumstances be classified as foods, although it is stated that, if special dietary claims are also made for it, it would *also* be subject to the regulations which are the subject of these hearings.

It should be observed, however, that the minimum daily requirements, as provided for special dietary foods in these regulations, are not medicinal doses.

Things We Did Not Have Ten Years Ago

Streamline trains, television, trans-oceanic passenger air service, synthetic rubber, fluorescent lighting, new ply-woods (stronger than steel), half a dozen new plastics and resins, polarized glass, glass building blocks, fiber glass for insulation and textile, synthetic hosiery, synthetic vitamins and hormones, sulfanilamide and sulfapyridine, drugs that kill the deadly streptococcus germs.—*Wall Street Journal*.

Registration in Association Colleges During the Past Fifteen Years*

By Dr. ERNEST LITTLE

Dean, Rutgers University College of Pharmacy

I AM glad to comply with the request of your secretary in presenting to you some facts relative to registration in our colleges of pharmacy which may be of some interest to you.

I am sure you appreciate that such a study could hardly cover the whole 130-year period of pharmaceutical education in this country and that little could be accomplished by attempting to cover such a long period of time, even though accurate records were available.

I have seen fit to begin this study with the advent of the minimum three-year course. The study can be extended at some future time if it seems desirable to do so. I personally doubt if much of value can be accomplished by going farther back than 1925.

A study of the data and enrollment curve presented with this paper reveals some interesting information and allows of equally interesting interpretations.

It has been said that whereas figures don't lie, it still remains undisputed that liars do figure. Ignoring the applicability of the above statement for the moment, I nevertheless promise not to allow my "figuring" to become too imaginative or to assume unreasonable proportions.

No less an authority than William Shakespeare observed that people of definite satanic dispositions have been known to selfishly utilize biblical quotations. Although I would not want any of you to gain the impression that I feel especially "pointed at" by the above statement, I shall nevertheless try to prevent any preconceived notion from directing the course of my interpretations.

There are several factors which have frequently been mentioned as exerting definite influences upon attendance in our colleges of pharmacy during the period under discussion.

Among those most frequently mentioned we find (1) prohibition, (2) the depression, (3) the advent of the four-year course and (4) inadequate opportunities in the field of pharmacy.

* Presented before the Section on Education and Legislation, A. PH. A., at the Richmond meeting, 1940

Not infrequently I have heard the statement that the enactment of the eighteenth amendment, which made it possible for pharmacists to realize substantial revenue from liquor prescriptions, attracted a considerable number of an exceedingly commercial and generally undesirable type of student to our colleges of pharmacy. This comment is usually followed by the statement that it is not surprising that our enrollments slumped off when such opportunities no longer existed.

An examination of the curve in the chart on the next page, not only fails to confirm but definitely contradicts such statements.

It is readily seen that during the seven or more years of the prohibition period, which are here represented, the trend of enrollment was definitely downward and has steadily *increased* during the seven years following its repeal.

Let us hear no more about prohibition attracting large numbers of students with bootlegging tendencies to our colleges of pharmacy.

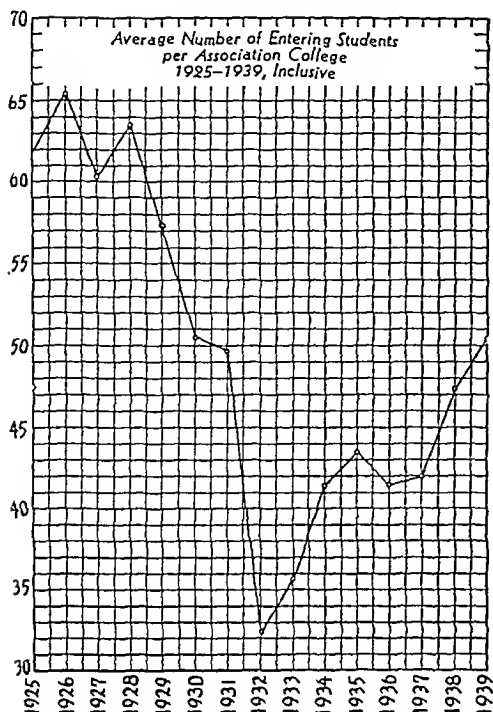
If this point is ever again raised in this connection, do not fail to establish the point that decreasing enrollments during prohibition years clearly indicate that the opportunities made possible by prohibition had no enduring inflationary effect on college enrollments and that more and definitely superior students have enrolled in our colleges following its repeal.

Others have attempted to interpret our fluctuations in enrollment entirely in terms of economic conditions.

They point out that our enrollments decreased during the more pronounced depression years, that the precipitate decrease ended with the depth of the depression in 1932 and that matriculation has steadily increased since that time.

It is, of course, recognized that economic conditions do influence college enrollments. It could hardly be otherwise. The statement most generally made is that a depression of short duration results in increased enrollments whereas a longer depression results in decreased enrollments.

A glance at the accompanying curve shows that our enrollments have followed no such general



pattern. We find decreases during the inflationary period culminating in 1929. We find these decreases continued rather sharply during the first two years of the depression, to be followed by gradual but continued increases during that part of the depression where the opposite trend might very logically have been expected.

There are some enthusiasts who contend that the depression terminated in 1933 and that we have, with minor interruptions, been enjoying prosperity since that time. Others point to relief rolls of monumental proportions, taxes which are both record- and back-breaking, unemployment still hovering around the 10,000,000 mark, a national debt pointing definitely in the direction of bankruptcy, and contend that current economic problems are very similar to those of 1929 and, in certain important fundamentals, much worse.

In order to guard against the possibility of having this discussion deteriorate into a political or partisan debate, may we agree that relief rolls, unemployment statistics, low interest rates, huge reserves of unemployed capital and other fundamental indices indicate that the depression is not entirely a matter of past history, that our enrollment curve is therefore unorthodox, and that some force or forces other than economic ones are responsible for the general pattern of matriculation which we are attempting to interpret.

Probably many of you have felt that the fundamental cause of decreased enrollments, as compared with those of fifteen years ago, is the continued increase in educational standards culminating in the adoption of the minimum four-year course in 1932. A mere glance at the enrollment curve might tend to support such an opinion. A more careful study prompts other comments.

It is not surprising that the first four-year class enrolled in the fall of 1932 represented a decrease of about 35% as compared with the last three year entering class. We should expect the immediate effect of such a substantial increase in requirements to be profound. The first reaction to a change in standards of that magnitude is one of emotion rather than reason.

What happened in the years immediately following 1932 is of greater significance.

In the fall of 1932 I would have ventured the opinion that all we could look forward to with any certainty in the years just ahead would be gradually diminishing decreases in enrollment for several years, followed by a leveling off which might in turn be followed by a gradual increase. The immediate and continued improvement in enrollment since the admission of our first four-year class affords the best possible justification of the minimum four-year course. The pattern from 1932 on represents the seasoned judgment and conclusions of interested observers who had an ever-increasing number of facts and observations at their disposal as a basis of judgment. It says with considerable clarity that the four-year course is fundamentally sound, well received and thoroughly justified.

Our enrollment is now substantially the same as that of the last year of the three-year course. There seems to be no reason why it should not continue to increase as the needs of the profession dictate.

A short time ago I heard a man who is prominent and respected in the profession of pharmacy make the statement that in his judgment there was one and only one really basic reason why enrollments in our colleges of pharmacy are substantially less than they were fifteen years ago, and that is decreasing professional opportunities for our pharmacy college graduates.

I do not share this ominous and depressing opinion. If we divide the fifteen-year period, which is pictured on the curve, into two equal parts, we observe that whereas enrollment decreased during the first half it has substantially

increased during the second. If the opinion that the decrease in enrollment ending in 1932 was due to decreasing professional opportunities is justified, are we not equally justified in assuming that the substantial and continued increase since 1932 has been due to greatly *increased* professional opportunities? Is it not also significant that this latter tendency is the more recent and still prevailing trend?

Many of us are convinced that there never were better opportunities for a really worthy service at a fair remuneration in the field of pharmacy than exist at the present time. It may well be that these opportunities are not as apparent as others once were. It may be that more ingenuity is required to discover them and that some altruism is essential in order to fully appreciate and enjoy them, but is there any among us who would have it otherwise? Does not such a condition merely indicate that one must be possessed of both ability and character in order to discover and enjoy the real opportunities and privileges of the profession of pharmacy? Should a real professional man object to such a condition?

When all of us spend less time looking for ready-made opportunities and apply ourselves more diligently to the making of worthy ones, our profession will progress to heights never before attained.

In view of the previous comments, it would seem that our enrollment statistics of the past fifteen years lend themselves to constructive and encouraging interpretations when considered from a standpoint of (1) the prohibition era, (2) the depression, (3) the advent and effects of the four year course, (4) professional opportunities in the field of pharmacy and (5), most important of all, a justification of the minimum four-year course.

Any discussion of the relationship which may exist between the supply and demand of registered pharmacists at the present time is a little outside of the scope of this paper. I would, however, venture the opinion that in some very few states an overproduction of registered pharmacists still exists, in some few states we have a really serious shortage developing, while the condition existing in a big majority of the states might be referred to as a rather wholesome shortage.

This problem of regulating, so far as possible, the supply and demand of registered pharmacists in the various states should be carefully studied. We have witnessed the evils of overproduction;

serious underproduction would unquestionably prove equally destructive.

Another problem, closely akin to a study of enrollment, is the proper selection of students entering our colleges of pharmacy. In this connection, I would like to call attention to the work of the American Association of Colleges of Pharmacy Committee on Pharmacy Predictive and Achievement Tests.

This committee, under the capable leadership of Dr. C. J. Klemme, has outlined a long-term program which is now being put into operation. We may look forward to continued work and worthy accomplishments from this group.

In general a study of enrollment and closely related problems in our colleges of pharmacy should give rise to a spirit of optimism and confidence in the future of our profession.

Pharmaceutical educators, working under severe handicaps, have formulated a program which is more appreciated as you become more familiar with it.

We should meet our individual responsibilities with the conviction that pharmacy is definitely pointed up stream and that better and not worse days lie ahead of us.

Tannic Acid Jelly

The following formula gives a product suitable for use on burns according to the *Pharmaceutical Journal* published by the Pharmaceutical Society of Great Britain:

Tannic acid.....	5.0 Gm.
Powdered tragacanth (No. 1 quality in 140 powder).....	2.1 Gm.
Para-chlor-meta-cresol.....	0.1 Gm.
Potassium chloride.....	0.042 Gm.
Sodium chloride.....	1.05 Gm.
Calcium chloride.....	0.084 Gm.
Industrial methylated spirit.....	6.0 mls
Distilled water.....to	100.0 mls

Raise the water to boiling for fifteen minutes. Add the para-chlor-meta-cresol, plug the flask and shake until the antiseptic has dissolved. When cool, dissolve the tannic acid and salts; strain through wool. Place the industrial spirit in a previously dried wide-mouth bottle. Add the tragacanth, and shake occasionally for twenty minutes. Complete by adding in one manipulation the whole of the aqueous solution to the gum-spirit suspension. Shake vigorously, seal well and pack into collapsible tubes. In place of the *para-chlor-meta-cresol*, 0.5 per cent phenol, which should be dissolved with the salts, could be used as a preservative.

Cosmetic Course for Pharmacists

By F. S. BUKEY

College of Pharmacy, University of Nebraska

Although pharmacists, as a rule, do not manufacture cosmetics, they must be familiar with their composition, their merits and their limitations if they are to serve their clients intelligently.

HAVING offered a course in cosmetics in the University of Nebraska for 15 years, and having defended its existence both with students and pharmacists, I feel that some of these points of discussion should be made known. It is my personal opinion that a properly taught course in cosmetics is essential to any student going into the retail drug business, for two reasons: first, it enables him to purchase stock more wisely; second, he is better equipped to discuss the subject of cosmetics more intelligently with his customers. Considering the first point, the average retail pharmacist is exposed to various types of sales representatives from the cosmetic houses. Some of these men come from reputable houses which do not make extravagant claims for their products; while others, in order to promote sales, will make very unreasonable statements regarding their products which cannot be backed up by scientific investigation. The pharmacist, knowing the general composition of the cosmetic and under what conditions it is effective, may refute the false claims and be able to select more wisely the cosmetics which he will sell to his customers. Considering the second point, it is not always wise to discuss the merits of a certain product with an individual who comes into the store with a definite product in mind. The product may or may not be the best that this individual could purchase for his money. If, however, the occasion arises, the pharmacist who is able to speak intelligently on the subject may make some suggestion regarding the use of the cosmetic, and will, no doubt, gain the confidence of the individual.

I have often had students maintain that the laboratory course in cosmetics would be of no value to them in the retail business since it would not be practicable to manufacture their own preparations. On this point I will agree, as the pharmacist cannot compete with the manufacturer on a purchase of raw material and containers. In order to demonstrate this, let us consider a formula for hair oil which is composed of mineral oil, oil-soluble red dye and rose perfume.

The mineral oil would cost the pharmacist, through his wholesaler in five gallon lots, 75 cents a gallon. The manufacturer would pay between 38 and 41 cents a gallon for the same oil. If the pharmacist intends packaging his hair oil in pints, 40 bottles must be procured. The prescription bottles would have no appeal for a product of this type. In order to get a shaker top bottle he would of necessity have to purchase a case—thus buying many more bottles than he would need. His rose perfume might be purchased in ounce containers at considerably more than pound prices which are available to the manufacturer. The red dye would have to be purchased in larger quantities than would be necessary for his initial batch of hair oil. Another item of expense would be bottle caps and labels which must be purchased in lots of 1000 or more. It is obvious that the manufacturer will have considerable margin of profit on every item. And it is doubtful whether the pharmacist would much more than break even on the product he manufactures. The same would be true of any cosmetic that he might choose to make.

A general course in cosmetics is of value to the retail pharmacist since it affords an understanding of the composition of the products which he sells. It is true that the days of extravagant claims have passed with the enactment of the Food, Drug and Cosmetic Act. Without a course of this type where package cost is discussed, a pharmacist may not realize that the cost of a cosmetic container may be considerably more than that of the ingredients it contains. I once heard a manufacturer make the statement before a state pharmaceutical meeting that it did not make any difference whether a cold cream retailed for 25 cents or \$2.50 a jar, it all came out of the same vat. Only those who have made a study of these products know how true this statement really is. When one considers nationally advertised cosmetics it must be remembered that the customer is paying the advertising bill with nothing to gain in superiority or quality from many other products. It is not uncommon for some

manufacturers to use as high as 30 to 60 per cent of every net dollar for advertising.

A course in cosmetics for the pharmacist should be composed of at least one hour lecture and four hours of laboratory each week for one semester. The lecture work should cover all types of cosmetics, as to their method of manufacture, packaging, cost and sales methods. The laboratory work should consist of the preparation of a representative number of every type of cosmetic.

I wish to make known my position with respect to the inclusion of this subject in the Pharmaceutical Syllabus. A course of this kind should not be included as a requirement since there are some students who do not like the subject and will have no future need for the material offered as they will go into other branches of pharmacy. Another very good reason for not offering such a course in every school of pharmacy is the personnel problem. In order to teach a course in cosmetics, the individual must have a liking for such work and thoroughly enjoy the development of new products, new sales ideas and the esthetic appeal so necessary for the promotion of this type of merchandise. Unless the instructor has these prerequisites, his course will not have the necessary interest to hold the attention of the student.

Sulfanilamide and Air-Raid Casualties

The value of sulfanilamide, administered locally and by the mouth, is shown in a report on twelve air-raid casualties whose treatment is reviewed by A. R. Hodgson and G. K. McKee in *The British Medical Journal* for July 3rd. The general treatment was on the following lines. The patients were put to bed with hot-water bottles and the foot of the bed raised; morphine (if not already administered) and 2000 units of tetanus antitoxin were given. The more severely shocked cases received plasma transfusions.

In the operation all the patients received a general anesthetic, ether being given by the open method. The clothes were cut off and the wound exposed; a sterile swab was placed over the wound and the surrounding skin cleansed with ether soap and shaved. Next any gross contamination was removed from the wound with forceps and then solution of Dettol 50 per cent in spirit colored with methylene blue was applied first to the wound and then to the surrounding skin. The skin edges were excised, and so were all the deeper structures that were colored blue and were readily accessible. Deep perforating tracks which could not be opened up were carefully explored for pieces of bomb casing;

the whole wound, and especially these tracks, was then packed with sulfanilamide powder.

Upon returning the patient to the ward the treatment for shock was continued. Sulfanilamide, 15 grains every four hours, was given by mouth as soon as the patients could take it, and was continued for twenty-four to forty-eight hours, according to the temperature chart. Wound dressing was avoided as far as possible.—*Pharmaceutical Journal*.

Medical Supplies for Britain

The medical and surgical supply committee of Constance Hope Associates, Inc., of which Mrs. Ronald B. Balcom is the chairman, reports that up to October 7th, \$34,575 in the form of pharmaceutical and medical supplies, surgical equipment and cash contributions had been received. Of this total she stated \$25,000 worth of equipment and supplies had already been sent to England, where the British Red Cross is in charge of its distribution among hospitals. The committee which was formed last August is engaged in a nation-wide campaign for surgical and medical supplies with which to equip emergency stations and field hospitals to help relieve the present crisis abroad.

Surgical instruments and supplies for treating air raid victims in London are in urgent need. American doctors are asked to contribute their surplus instruments to help save lives that may be otherwise lost. Injuries to head, chest and bones are most numerous. The *Journal of the A. M. A.* for October 5th, carries a list of instruments most necessary.—*Science News Letter*.

Responsible physicians warn that America is in danger of invasion by epidemics, such as the influenza scourge of 1918. It is stressed that the supply of quinine is not adequate to meet such demand, but that steps are being taken to overcome this deficiency.—*Science News Letter*.

The yam, or southern sweet potato, contains the high quality cellulose, starch and sugars which are easily convertible into explosives, according to Gilbert C. Wilson, instructor of chemistry at North Texas State Teachers College.—*Pathfinder*.

Sleeping at the wheel is prevented by the use of a newly patented vaporizer attached to the steering wheel. By means of this device, aromatic spirit of ammonia is blown into the face of the driver, which, upon being inhaled, quickly overcomes his sleepiness. The blower operates automatically when drowsiness causes the driver to relax his grip on the wheel.—*Mechanix Illustrated*.

Professional Relations

By C. B. JORDAN

Chairman, Committee on Professional Relations of the A. Ph. A.

One of the objectives set forth by the founders of the A. Ph. A. in 1851 was the fostering of improved professional relations. Dean Jordan's Committee is engaged in this activity. Information from South Carolina, Connecticut, Kentucky, Montana and other states is here set forth.

YOUR chairman has continued to endeavor to make contact with the professional relations committees of all the states and has received some very encouraging reports indicating that more attention is being given to professional relations by each of the state associations. Requests have come to him from several states for information regarding the activity that can be profitably carried on by professional relations committees and all available information has been supplied.

An enthusiastic report of the benefits of professional relations activities has reached your chairman and I believe it is worth passing along, as it may inspire others to attempt professional relations work.

"We started here ten and a half years ago and the first year filled about 650 to 700 prescriptions, new and refills. 1939 figures show approximately 5000 new and refills and at the present time if we continue as we have during the first six months of this year we will run somewhere between 5500 and 6000 new and refills for 1940. The first six months of 1940 show about 12% increase in prescription work. Also, an interesting thing to note is that better than 20% of our gross business for this period is represented in new and refill prescriptions. Since October 1938, we have been using Pictorial's window service for professional windows and have found it pays high in dividend, for 1939 was about 15% higher than 1938 for prescription practice and as you see 1940 is running well ahead of 1939. All of this is in spite of the fact we are a neighborhood store, one mile from downtown and no doctors located in this vicinity. We boast of one of the finest prescription departments in the city. There may be others as good, but everything considered, you could not say there is a better one in town. This all leads me to the statement: 'Our record proves that you can practice pharmacy if you so desire and will go where there is some opportunity to do such.'"

In my first report of the work of this committee (see August issue of THIS JOURNAL) attention was given to the fine work being done in Ohio. I am now glad to report that an Academy of Pharmacy has been established in South Carolina. This report comes to me from Professor W. D. Strother of the University of South Carolina. He transmitted a copy of the constitution of the academy which contains thirteen articles and in addition there are ten by-laws. Obviously, the constitution and by-laws are too long to be reported here but, if there is any state contemplating the organization of an academy of pharmacy, I feel sure they can obtain considerable information of value by addressing Professor Strother. Your Chairman was particularly interested in Article 9, "Pledge," which reads as follows:

"The following pledge must be signed by all applicants for membership in the Academy.

"I have read the constitution and by-laws of the South Carolina Academy of Pharmacy.

"I hereby accept as a condition of membership in the Academy, all its principles, declarations and regulations.

"I pledge myself to refrain from practices which tend to discredit pharmacy and to devote my best efforts to the advancement of my profession or surrender my membership.

A very fine report comes to your chairman from the active group in Connecticut through Mr. John J. Dugan, chairman of the Scientific Committee of the Connecticut Pharmaceutical Association. His report is as follows:

"At a recent meeting of The Boards and Colleges of Pharmacy, Dr. Hugh P. Beirne read a paper, entitled 'Are the Boards Bored?' This paper stimulated much intelligent discussion as to just how we were going to encourage professional pharmacy.

"The Scientific Committee of The Connecticut Pharmaceutical Association in cooperation with the Connecticut College of Pharmacy and The Connecticut State Board of Pharmacy arranged a wholly professional program in order to seek an answer to our problem.

"Some of our observations are as follows:

"Pharmacists are definitely interested. (Our attendance was 130 pharmacists; we expected only about 50.) Every seat was taken.

"Each pharmacist paid admission to enter the meeting; thereby establishing proof of his or her genuine interest.

"Letters have been received from all parts of the state thanking us for our efforts and stating that men who had attended were going to give talks about the material at their local groups.

"The Medical Society of Connecticut has asked us to establish a joint conference committee, because of our interest in public health.

"Enclosed you will find press clippings which express the public reaction—our idea of the best answer to radio drug store jokes.

"We are sending you this information with the hope that we, in pharmacy, may join hands and ideas to promote professional pharmacy. Please send us information on your experiences in order to help us."

Mr. E. M. Josey, secretary of the Kentucky Pharmaceutical Association reports as follows:

"Beginning about five years before our flood in 1937 we used two druggists in Kentucky and one doctor who made a tour of the different medical and dental county society meetings, where they preached U. S. P. and N. F. information to the doctors. When the flood came our prescription department which we had been using was destroyed and due to the financial conditions of our Association nothing was done to replace the department lost.

"However, at our recent meeting in June, \$500.00 was voted to a committee on professional relations for a booth at the Southern Medical Meeting to be held in Louisville, Kentucky this fall. We anticipate beginning our tour of county medical societies after this meeting is over.

"For the past three years we have devoted most of our time to the cleaning up of prescription departments in this State and getting them ready to present to the medical and dental profession and out of our 769 drug stores we have approximately 450 model prescription departments."

Your chairman is glad to report that professional relations committees have been appointed by pharmaceutical associations of Louisiana, New Mexico and California. The chairman of the Louisiana Committee is A. P. Lauve, Charity Hospital, New Orleans, La.; of the New Mexico Committee, C. C. Haussamen, 1323 W. Tijeras Ave., Albuquerque, New Mexico; and of the California Committee, Mr. J. C. Thackray, 301 Security Building, Long Beach, California. We will look forward with pleasure to receiving reports of the activities from these three states.

Montana, through Mr. J. A. Riedel, secretary of the Board of Pharmacy, reports as follows:

"I have your letter with reference to inter-relations as physicians and pharmacists. At this time the board is meeting with the Department of Public Health in Helena and, at which time arrangements are hoped to be perfected for this work which will employ an analyst inspector in the interests of public health, morals, etc., with endorsements of the State Medical Association.

"Naturally this is quite an undertaking and must lead to restriction of the dispensing of dangerous and habit-forming drugs to prescriptions exclusively. I look for this to be finally put into action some time this fall. I shall be pleased to give you details later on."

It is well to consider failures as well as successes in this field of activity and the careful study of obstacles met and conquered by others is always valuable. In this connection a very interesting report has come to your chairman pointing out some of the difficulties involved in getting coöperation and arousing interest on the part of pharmacists in the importance of professional relations activities. I am quoting from this report because it does emphasize the difficulties involved in getting a program started and the lack of appreciation on the part of pharmacists of the importance of this work.

"For the past seven years I have been either on the Committee of the N. A. R. D. or A. Ph. A. covering this subject. Things started to hum back in 1935 when a local committee on medical care asked if it were possible for a survey to be made regarding FERA prescriptions and this was done. The committee told the doctors they would not honor prescriptions for specialty products and they must stick to U. S. P. and N. F. to which the doctors replied we don't know anything about them. The committee then said to us, 'Won't you, can't you do something to help these men?' Our reply was 'Yes.' Our little group in the county went to work and spent about \$100.00 sending information to the doctors on the official medicines. They accepted it and prescribed and of course the retailers benefited in larger profits and by survey we found the patient paid on an average 20% less for the same type of prescription, that is an official prescription for cough as compared to a specialty for that purpose.

"In 1936 at my asking or suggestion the state association created a committee known as U. S. P. & N. F. and I personally raised around \$200.00 by just asking men in the state to contribute \$10.00 to this work. The fund was used to build a display of official medicines which we took to the state medical meeting in 1937, 1938 and 1939. This display was given to the state association at our meeting in 1937 and at that time they were enthusiastic and voted to

increase dues from \$3.00 per year to \$10.00 per year to carry out a program on a state wide basis. The committee refused to move until funds were available that we could operate at least six months and we did not get under way until the late part of 1938 and operated the program which you know about for eight months during the winter. The response from the medical profession was very good and in most places they wrote prescriptions for a greater amount of official medicines than they had been doing. In a number of cases where the pharmacist made some little attempt to follow up the work of the committee, the results were really remarkable. However, in far too many cases the pharmacist was like the colored boy's mule, he just didn't give a d---.

"In May 1939 we included a card with the letter sent the doctors and out of about 1225 around 425 came back to us and the doctors were very appreciative of our efforts. We worked this program again from October to June of this year and it was about the same story so far as the medical profession was concerned. But, so far as our own profession was concerned, about 20% of us were trying to help ourselves and about 80% were, by their attitude, tearing it down faster than we could build up. Pharmacists would call the doctor to ask who made syrup of this or that, an official preparation, and when he found out what it was, the odds were 10 to 1 he did not have it on hand and the doctor advised him to use some specialty in its place. Our men felt that they were being gouged for something that was doing them no good; the Professional Committee had done a poor job if the day after the cards and letters went out they did not get some prescriptions for exactly the same things as mentioned on those cards. They would, if they could, have the committee come to their place like a magician fill the prescription, put the money in the till and vanish.

"During the past two winters we have spent about

\$2000.00 to \$2500.00 in this work. There can be no doubt but what it has been money well spent. We have had several editorials in the journal of the Medical Society and, adding everything up, we have a better feeling between pharmacy and medicine than previously existed. Knowing the feeling of a great many of our members, at our meeting in July in rendering the committee report, we offered a resolution to the effect that we believed this to be a problem of mutual interest to medicine and pharmacy and that we would do no further promotion work of this kind unless the medical association deemed it advisable and appointed a like committee to work jointly with our committee. That was one way of getting out of this thing so far as I was concerned, and I felt, if the doctors were not interested after the money we had spent, then why continue to butt our heads against the 80% of our own members who are not much pleased about the matter. The doctors held their convention last week but as yet I have heard nothing from that meeting, but doubt seriously if they gave any consideration to our resolution.

"In consideration of what the Committee should do to better professional relations, frankly, I think the biggest job we have on our hands is to sell pharmacy to pharmacists themselves, then give them some material to work with and let them get to work and the ultimate result of work along this line will definitely either directly or indirectly go a long way toward improving professional relations between pharmacy and medicine."

It is one of the functions of professional relations committees to find ways and means of overcoming the apathy of pharmacists and physicians in this field and we shall be glad to give such advice as we can in helping state and local committees to achieve results.

Detroit Next August

The Convention Committee arranging the Eighty-ninth annual meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION to be held in Detroit August 17 to 23, 1941, has selected the Hotel Statler as convention headquarters.

This hotel, located on Grand Circus Park in the heart of downtown Detroit, was particularly designed by architects who incorporated into the building all those facilities necessary for a satisfactory handling of conventions.

Most important is the fact that all meeting rooms are on a single floor and serviced by a private elevator running direct from the main lobby. On this floor are twelve rooms of different sizes with seating

capacities varying from 40 to 1600 persons, thus affording facilities for meetings, luncheons or banquets of any size. These rooms are all air-conditioned for your comfort. Two large foyers and a large assembly hall provide ample space for registration and displays.

A modern public address system, monitor controlled, is available in all the large meeting rooms. Table and floor stand microphones are standard equipment, as are also moving picture projectors, stereopticons, screens, pointers, rostrums, blackboards, platforms, tables, exhibit booth equipment and folding screens.

The Convention Committee feels that in selecting

Hotel Statler as its headquarters, the interests of the ASSOCIATION and the comforts of its guests can be served best.

Since the announcement that the annual convention would be held in Detroit there has been much enthusiasm among the Detroit Branch members and plans are already advanced for providing suitable meetings and entertainment befitting the fourth city of the United States. Known as "The City of Progress—Where Life Is Worth Living" and the center of the pharmaceutical manufacturing industry, Detroit has much to show and its pharmacists a reputation to maintain.

The officers of the Detroit Branch are: *president*, W. M. Chase, of Parke, Davis & Co.; *first vice-president*, F. G. Vanderbrooks, Wayne University; *second vice-president*, William Schenk, Detroit Institute of Technology; *third vice-president*, Marjorie Kern, University of Michigan; *secretary*, B. A. Bialk, 11655 Hamilton Avenue; *treasurer*, R. L. McCabe, 8700 Grand River Avenue; *council representative*, H. A. K. Whitney, University Hospital, Ann Arbor; *chairman*, Program Committee, Dean R. T. Lakey, Wayne University.

Hospital Pharmacy Standards Advanced

The Manual of Hospital Standardization just issued by the American College of Surgeons carries the following statement under the heading of "Additional Departments and Services:"

"PHARMACY

"The pharmacy is one of the most extensively used therapeutic facilities in the hospital, and yet there is an urgent need for the improvement of this service in many institutions. Hospital managements and medical staffs should direct attention to the organization of an efficient, ethical pharmacy which will insure safety and the best service possible to the patient. As a helpful guide to this end, the five principles have been embodied in a *Minimum Standard for Hospital Pharmacies*.

"As noted in the requirements of the standard, the pharmacy should supply all drugs to both in-patient and out-patient services, whether they be manufactured stock drugs and solutions or prescriptions. The most effective means of securing efficiency and economy in this department is the adoption of a well-compiled hospital pharmacopœia that will facilitate uniform prescribing of drugs and limit them to the official pharmaceutical preparations. Some hospitals have applied this plan most successfully with results beyond all expectations.

"The law in most states and provinces requires

that only licensed pharmacists may compound prescriptions, and this law should be strictly observed. A pharmacist may be on a full-time or part-time basis as required, and he alone should be allowed to dispense prescriptions. If the amount of work does not warrant the employment of a pharmacist, arrangements should be made with one in a convenient commercial pharmacy to dispense all prescriptions, the hospital possibly maintaining a drug room from which stocks of prepared drugs are issued. It may be found advisable in some hospitals to employ a part-time pharmacist who spends a few hours each day at the hospital.

"The physician's order for drugs should be written in duplicate, the original being sent to the pharmacy and the duplicate retained on the floor. Keeping such a record in the pharmacy is a legal requirement often ignored. All prescriptions are then numbered and filed serially in one of the prescription files designed for use in a commercial pharmacy.

"Because of the serious responsibility of supplying a reliable pharmacy service in hospitals, every institution should endeavor to comply as far as possible with essential requirements."

Hedgehogs are being mobilized to safeguard Britain's food supply. They are needed by the Ministry of Agriculture for possible use as foot-and-mouth disease detectors. Normally, an outbreak of this disease is detected by scientific means; but hedgehogs are highly susceptible to it and will fill the bill if air raids cause a breakdown in the present system.—*Everybody's* (London).

For the benefit of skeptics as to the virtues of Vitamins B and C in stimulating plant growth, the State University of Iowa reports that eggplants developed double-length stems with triple-weight tops. Tobacco leaf was more than doubled by a diet of ascorbic acid.—*Hospital Topics*.

Soon you may be able to brag about the glass stitches in that operation you had. Glass thread has been found easy to handle and sterilize and is absorbed slowly by the body when used to sew up incisions.—*The Woman*.

An aluminum windowpane has been developed which is equal to glass in transparency. An American company is marketing a new type of window glass called "Aklo," which permits light to pass through, but holds back seventy per cent of the heat rays.

Shellac which is used on furniture and articles used in every home, giving them a protective covering, is made from the outside shell of a tiny beetle which lives in India. About 150,000 shells go to make one pound of shellac.

Pharmacies and Drug Stores*

By THOMAS ROACH

Here the author discusses the effect of the proposed distinction between pharmacies and drug stores on the stores rendering a complete pharmaceutical service and those which do not.

MY FIRST thought on this matter is that the evolution of the old-fashioned "Apothecary Shop," which for its day and generation did render a complete pharmaceutical service, into the modern drug store in this country, covered a period of nearly a century—three-fourths of one at least. It is not going to be the work of a few months or years to change the present set-up into its now pretty well recognized two (at least) component parts.

I think no one need worry about its immediate effect, especially from a financial standpoint, either good or bad, on the two classes of businesses affected. It will take at least a generation to get this well on its way to being done. There has been considerable talk, some work, and quite a few establishments have been started, tending in this direction, during the last ten or fifteen years, yet the surface is barely scratched. As to its effect on those stores giving a complete pharmaceutical service, it goes without saying that we feel its effect will be very beneficial indeed, yet we must realize that with every benefit there also comes an obligation. Upon those of us who feel interested in conducting establishments which try to give a complete pharmaceutical service, will fall the larger part of the burden of educating the public, from the physician down to the humblest private citizen, to the necessity of such a distinction, and the good that will inure to everybody concerned by this being brought about.

Eventually legislation should be enacted which would differentiate between the two classes of establishments, on the one hand requiring higher qualifications than are now demanded of "Pharmacists,"¹ or those conducting a "Pharmacy," consisting perhaps of a higher basic science education, as well as a preliminary training comparable to the internship of the physician.

On the other hand, for "Druggists,"¹ or those

who conduct a "Drug Store," it is very likely the legal requirements should be scaled down quite a bit from the present requirements, as certainly it is unnecessary for a person to spend four years in a college of pharmacy to learn how to sell proprietary medicines, sundries and a few manufactured pills. There is no sound economic reason for the continuance of the present status of the so-called drug store of today, it having to be operated by, or in charge of, a registered pharmacist with his years of college training.

It may sound like treason to some of my brethren, but I honestly believe that not one drug store in ten is justifying its existence as a depot of pharmaceutical service, yet as a public convenience they are nearly all well nigh indispensable, more on account of the wide variety of items handled and services rendered than the amount of drugs and medicines dispensed.

Pharmacy must be brought up to the same high standards that the medical profession is striving for to the end that it will march alongside that profession, not trail behind. The modern physician needs a modern pharmacy just as badly as he needs a modern hospital, but he, like most of the rest of John Q. Public, has not been made as cognizant of that need as he should have been, simply because pharmacy has not been on the job, either in fulfilling that need or in educating him to distinguish between the establishment rendering a complete pharmaceutical service and one that does not.

To-day the average physician's patronage goes to his favorite drug store, more on account of personal feeling for its proprietor or his clerks, than for its pharmaceutical fitness. It will give the pharmacist more of an incentive to stick to his profession because of the fact that added appreciation of his efforts on the part of the public will relieve him of the necessity of trying to make his place of business an emporium containing almost anything salable, and give him more time, and money as well, to devote to things pharmaceutical.

To the "Druggist" it should be a God-send, for

* Presented before the Section on Practical Pharmacy, A. P. H. A., at the Richmond meeting, 1940.

¹ The names Pharmacy and Pharmacist, Drug Stores and Druggist are used to designate the two classes involved for the sake of brevity, not with the idea of supplying their ultimate names.

it will relieve him of many of the trivial worries he now has, as well as some of the larger ones, in that he will not have to maintain a registered pharmacist or two in his store at a higher salary than a clerk without such qualifications can command. Nor will he have to maintain a stock of pharmaceuticals in whose sale he has no interest, to be able to carry on his business. His time and money can be freed to enlarge and embellish his merchandising mart to his heart's content, for he is a man of merchandising tendencies, not of "pharmaceutical leanings." In summing up the effect of the proposed distinction on the two classes involved, the writer thinks that in the long run it will be highly advantageous to both groups, if for no other reason than that a man will not have to "carry on" a profession with so much business endeavor attached to it on the one hand or, on the other, he will not have his otherwise progressive business "loaded down" with an infinitesimally small amount of professional endeavor.

Book Review

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1939 with the Comments That Have Appeared in The Journal. Cloth, pp. 205, with 5 illustrations. Chicago: American Medical Association, 1940. Price \$1.00.

Only seven of the thirty-five reports listed in this annual collected report are of the familiar "Not Acceptable" or condemnatory type. Two reports announce omission of products from N. N. R., one being off the market. The remainder, far superior in bulk as well as in number, are concerned with educational and constructive considerations. This trend has been noticeable in recent years; it reflects the great predominance of the constructive over what may be called the destructive side of the Council's work of promoting rational therapeutics.

The educational reports touch three fields on which lie the front lines of present-day therapeutics progress—chemotherapeutics, endocrines and vitamins. Two reports on sulfapyridine deal with the status and Council acceptance of commercial brands. The report on neoprontosil recognizes that term as the Winthrop Chemical Company's proprietary name for 4-sulfonamide benzene-2-azo-1-hydroxy-7-acetylamino naphthalene-3:6-disodium sulfonate, and azosulfamide as the non-proprietary name for the same substance. The

articles on dilantin sodium, sobisminol mass and sobisminol solution are status reports which accompanied the descriptions of accepted brands, a type of article increasingly used by the Council. Dilantin sodium is the new drug used in the treatment of epilepsy and has been accepted by the Council with carefully stated limitations for its use; sobisminol mass and sobisminol solution are new soluble bismuth preparations for use in the treatment of syphilis; they are noteworthy in that sobisminol mass has been shown to be effective when used orally. The reports on racephedrine and nikelthamide deal with nomenclature; these terms are recognized as non-proprietary names for racemic ephedrine (the sulfate and hydrochloride are also recognized) and pyridine- β -carboxylic acid diethylamide, respectively; the latter was introduced into medicine under the proprietary name coramine-Ciba and was the subject of a preliminary report by the Council in 1929 (*A. M. A. Journal*, June 1, 1929, p. 1837).

The status report on questions concerning vitamins compiled by the Coöperative Committee on Vitamins of the Councils on Pharmacy and Chemistry and on Foods is becoming an almost annual event, awaited for the revisions of the "allowable claims" found acceptable for the various vitamins. This year's revisions are not extensive but the report is noteworthy for the reëmphasis of the Council's stand on the subject of vitamins and vitamin mixtures. Alas, the Councils' is but one clear, authoritative voice of rationality in to-day's whirlwind of polyvitamin and polyvitamin-mineral absurdities foisted on the gullible public by astute and sophisticated advertising technique. The preliminary and supplementary reports by Snell and by Snell and Butt on the new principle for active hemorrhagic diathesis known as "vitamin K" are timely and noteworthy.

Three "special" reports are worthy of mention. One is the warning report on the dosages of intra-urethral injection of solutions of local anesthetics, a reaffirmative strengthening of previous Council pronouncements. Another is the Council statement Manganese in the Treatment of Dermatologic Disorders, which is buttressed by the conclusive and well-documented paper of Dr. Maurice Sullivan, considered and sponsored by the Council. The third is the Study of the Promiscuous Use of the Barbiturates, Their Use in Suicides, a paper by Dr. W. E. Hambourger based on a review of medical literature and study of vital statistics. This study was authorized by the Board of Trustees of the A. M. A. and will be followed by other papers dealing with other aspects of the problem.

The present annual volume of Council reports is somewhat larger than usual and somewhat above the average issue in interest.

National Dental Program

By G. C. SCHICKS, *Chairman*

Formula Comments on Ninth Dental Formula Series

THE National Formulary recognizes a liniment of aconite and iodine compound designated as a "dentiliment" to show its specific use by the dental profession. It contains 2% iodine, 30% chloroform, 25% Flex. Aconite, alcohol and water. It is used to relieve pain from inflammation of the pericemental membrane and of an undetermined origin. The preparation is counter-irritant due to the properties of iodine and chloroform. The aconite is not counter-irritant but is a circulatory depressant and nerve sedative. It first produces irritation, but this action is rather quickly overcome by a second action which depresses the sensory nerve endings. The preparation is a powerful poison. If used by the patient, he should be cautioned not to swallow it. It sometimes brings relief in facial neuralgia.

Phenol is an antiseptic, germicide and local anesthetic. A 5% solution is used to sterilize the hands and instruments. It is efficient against non-sporulating bacteria, but not against the spore of anthrax. Its bactericidal properties in liquid petrolatum are greatly reduced. In this medium, however, it is non-irritating.

Glycerite of phenol is used to prepare antiseptic solutions of phenol. It mixes with all proportions of water, which phenol does not.

Phenol camphoratum or a similar preparation is a popular item in some dental offices. It is used as an anodyne and antiseptic in painful sockets and ulcers.

Odontalgicum, N. F. V contains oil of cinnamon, 10 cc., phenol, 20 Gm. and methyl salicylate, 30 cc. This preparation is referred to as Black's 1, 2, 3. It is used as a toothache remedy and in the treatment of gangrenous pulps. The N. F. VI formula for Odontalgicum contains 25% of chlorobutanol in oil of clove. This preparation is efficient as a toothache remedy. Of course, any toothache remedy does not cure the condition causing the pain. Its purpose is to give temporary relief until the patient can visit the dentist so that the condition may be properly treated. This preparation may also be used as a local analgesic and is antiseptic.

During the past ten years especially, the use of dyes for the treatment of disease has found a

place in the field of medicine. So far as dentistry is concerned, Accepted Dental Remedies state

"Much remains to be done to determine their exact usefulness in dentistry. In the treatment of ulcers of the buccal mucosa such as may be associated with bacterial action, various dyes have been applied with allegedly beneficial results."

The vehicle in which dyes are dispensed probably has much to do with the efficacy of the action desired. Colloid dyes, for instance, may precipitate in solutions containing salts (electrolytes). Some of the dyes in this classification are mercurochrome, acriflavine and congo red. The action of these dyes may be due to a binding of the toxic products, therefore preventing tissue injury.

Scarlet Red, N. F. is classified as an azo dye. It is said to promote the growth of epithelium in the treatment of burns, wounds and chronic ulcers. A concentration of over 8% is irritating.

Methylosaniline is a triphenylmethane dye. Taken from the National Formulary, it is now official in the Second Supplement to the U. S. P. as Methylosaniline Chloride. The present N. F. recognizes a 3% solution, but the N. F. VII which is about to appear will find this solution changed to 1%. It is most efficient when used against gram-positive organisms. It is used in the treatment of staphylococcal and streptococcal infections.

Mercurochrome in the formula suggested is more effective than the 2% water solution. It is used as a surface disinfectant prior to operative procedures. It is not recommended in root canal therapy as the dye penetrates the tubules making it impossible to remove. It is incompatible with procaine, morphine, cocaine, iodides and bromides. The stain may be removed from the skin with a solution of sodium hypochlorite.

Inquiries

Question. A dental prescription calls for a 15% solution of gentian violet to be applied to infected areas. How can it be made and what is it used for?

Answer. According to the Second Supplement to the U. S. P., 1 Gm. gentian violet is soluble in

30-40 cc. of water, 10 cc. of alcohol, 15 cc. glycerin. A 15% solution is not possible. The N. F. gives a formula for a 3% solution. It is difficult to get much more than this amount in a water solution, although it does vary in solubility in different batches. A water solution is probably desired rather than an alcohol because of the destructive action of alcohol on the mucous membranes. Call the dentist; he will change the concentration.

This dye is quite often used in ulcerative conditions in the oral cavity, usually as a topical application or irrigation. It does not injure or irritate tissues and is antiseptic and bactericidal in action.

Question. I have tried to make the adhesive powder for artificial dentures and find it costs me more than the proprietary articles. How can it be made profitably when buying in small quantities?

Answer. The pharmacist can manufacture dental adhesive powder for less than he can buy brand products. In $\frac{1}{4}$ lb. lots tragacanth costs 46¢ and karaya, 24¢. The cost for tragacanth in the formula is 9¢; karaya, 2¢; container, 5¢; total, 16¢, exclusive of flavor; contents, 480 grains.

The three popular proprietary products cost the pharmacist:

For A—23¢; contains $\frac{3}{4}$ oz.; sells for 29¢.*

For B—23¢; contains $\frac{3}{4}$ oz.; sells for 29¢.*

For C—20¢; contains approximately 1 oz.; sells for 25¢.*

A contains all karaya, which is cheaper than tragacanth. Note the proprietary contents, about 328 grains, as against 480. The patient gets more and it costs the pharmacist less to manufacture the following formula:

Powdered Tragacanth	3 vi
Powdered Karaya	5 ii
Flavor	m. viii

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
October 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

* Selling prices are popular retail prices.

DEAR DR. PERKINS:

The ninth series of dental prescriptions enclosed contains formulas for a dental liniment, antiseptic agents and a tissue stimulant.

The dental liniment contains aconite in addition to two well known counter-irritants: iodine and chloroform. Aconite first irritates, causing stimulation, then depresses the sensory nerve endings, producing a tingling and numbness with analgesia. It is particularly useful in pericemental disturbances. Dry the surface before applying the preparation.

Prinz recommends the following formula to relieve symptoms of facial neuralgia:

	Metric Approx.	Apoth. Equivalents
R _x		
Menthol	4.0 Gm.	5 i
Chloroform	8.0 cc.	5 ii
Tr. Aconite q. s.	30.0 cc.	5 i

Sig: Apply externally over painful areas of face and cover with cotton.

Phenol in the combinations given is a useful antiseptic agent.

Scarlet red produces a favorable influence in forming new tissue on denuded surfaces. A thin coat is all that is necessary.

Gentian violet has been recently used for the treatment of Vincent's infection. It appears to have marked germicidal properties.

Mercurochrome is sometimes useful as a substitute for Tr. of Iodine as a pre-operative skin disinfectant where the patient is sensitive to iodine. It does not cause irritation.

If you desire further information about the uses or concentrations of any of these substances call Humboldt 3-5670

Very truly yours,

ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Prescriptions Series IX

COUNTER-IRRITANT

(a) R _x	Metric Approx.	Apoth. Equivalents
Iodine	1.2 Gm.	gr. xviiiis
Chloroform	18.0 cc.	5 ivss
Fl. Ext. Aconite	15.0 cc.	5 ss
Alcohol	21.0 cc.	5 v m. xv
M.		

Sig: Dental Liniment (office use). Paint on with caution.

Note: Compound Dental Liniment of Aconite and Iodine, N. F.
Counter-irritant to gingiva.

National Dental Program

By G. C. SCHICKS, *Chairman*

Formula Comments on Ninth Dental Formula Series

THE National Formulary recognizes a liniment of aconite and iodine compound designated as a "dentiliment" to show its specific use by the dental profession. It contains 2% iodine, 30% chloroform, 25% Flex. Aconite, alcohol and water. It is used to relieve pain from inflammation of the pericemental membrane and of an undetermined origin. The preparation is counter-irritant due to the properties of iodine and chloroform. The aconite is not counter-irritant but is a *circulatory depressant and nerve sedative*. It first produces irritation, but this action is rather quickly overcome by a second action which depresses the sensory nerve endings. The preparation is a powerful poison. If used by the patient, he should be cautioned not to swallow it. It sometimes brings relief in facial neuralgia.

Phenol is an antiseptic, germicide and local anesthetic. A 5% solution is used to sterilize the hands and instruments. It is efficient against non-sporulating bacteria, but not against the spore of anthrax. Its bactericidal properties in liquid petrolatum are greatly reduced. In this medium, however, it is non-irritating.

Glycerite of phenol is used to prepare antiseptic solutions of phenol. It mixes with all proportions of water, which phenol does not.

Phenol camphoratum or a similar preparation is a popular item in some dental offices. It is used as an anodyne and antiseptic in painful sockets and ulcers.

Odontalgicum, N. F. V contains oil of cinnamon, 10 cc., phenol, 20 Gm. and methyl salicylate, 30 cc. This preparation is referred to as Black's 1, 2, 3. It is used as a toothache remedy and in the treatment of gangrenous pulps. The N. F. VI formula for Odontalgicum contains 25% of chlorobutanol in oil of clove. This preparation is efficient as a toothache remedy. Of course, any toothache remedy does not cure the condition causing the pain. Its purpose is to give temporary relief until the patient can visit the dentist so that the condition may be properly treated. This preparation may also be used as a local analgesic and is antiseptic.

During the past ten years especially, the use of dyes for the treatment of disease has found a

place in the field of medicine. So far as dentistry is concerned, Accepted Dental Remedies states,

"Much remains to be done to determine their exact usefulness in dentistry. In the treatment of ulcers of the buccal mucosa such as may be associated with bacterial action, various dyes have been applied with allegedly beneficial results."

The vehicle in which dyes are dispensed probably has much to do with the efficacy of the action desired. Colloid dyes, for instance, may precipitate in solutions containing salts (electrolytes). Some of the dyes in this classification are mercurochrome, acriflavine and congo red. The action of these dyes may be due to a binding of the toxic products, therefore preventing tissue injury.

Scarlet Red, N. F. is classified as an azo dye. It is said to promote the growth of epithelium in the treatment of burns, wounds and chronic ulcers. A concentration of over 8% is irritating.

Methylosaniline is a triphenylmethane dye. Taken from the National Formulary, it is now official in the Second Supplement to the U. S. P. as Methylosaniline Chloride. The present N. F. recognizes a 3% solution, but the N. F. VII which is about to appear will find this solution changed to 1%. It is most efficient when used against gram-positive organisms. It is used in the treatment of staphylococcic and streptococcic infections.

Mercurochrome in the formula suggested is more effective than the 2% water solution. It is used as a surface disinfectant prior to operative procedures. It is not recommended in root canal therapy as the dye penetrates the tubules making it impossible to remove. It is incompatible with procaine, morphine, cocaine, iodides and bromides. The stain may be removed from the skin with a solution of sodium hypochlorite.

Inquiries

Question. A dental prescription calls for a 15% solution of gentian violet to be applied to infected areas. How can it be made and what is it used for?

Answer. According to the Second Supplement to the U. S. P., 1 Gm. gentian violet is soluble in

30-40 cc. of water, 10 cc. of alcohol, 15 cc. glycerin. A 15% solution is not possible. The N. F. gives a formula for a 3% solution. It is difficult to get much more than this amount in a water solution, although it does vary in solubility in different batches. A water solution is probably desired rather than an alcohol because of the destructive action of alcohol on the mucous membranes. Call the dentist; he will change the concentration.

This dye is quite often used in ulcerative conditions in the oral cavity, usually as a topical application or irrigation. It does not injure or irritate tissues and is antiseptic and bactericidal in action.

Question. I have tried to make the adhesive powder for artificial dentures and find it costs me more than the proprietary articles. How can it be made profitably when buying in small quantities?

Answer. The pharmacist can manufacture dental adhesive powder for less than he can buy brand products. In $\frac{1}{4}$ lb. lots tragacanth costs 46¢ and karaya, 24¢. The cost for tragacanth in the formula is 9¢; karaya, 2¢; container, 5¢; total, 16¢, exclusive of flavor; contents, 480 grains.

The three popular proprietary products cost the pharmacist:

For A—23¢; contains $\frac{3}{4}$ oz.; sells for 29¢.*

For B—23¢; contains $\frac{3}{4}$ oz.; sells for 29¢.*

For C—20¢; contains approximately 1 oz.; sells for 25¢.*

A contains all karaya, which is cheaper than tragacanth. Note the proprietary contents, about 328 grains, as against 480. The patient gets more and it costs the pharmacist less to manufacture the following formula:

Powdered Tragacanth	$\bar{5}$ vi
Powdered Karaya	$\bar{3}$ ii
Flavor	m. viii

Suggested Letter

The Hale Prescription Pharmacy
Lowell, Massachusetts
October 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

The ninth series of dental prescriptions enclosed contains formulas for a dental liniment, antiseptic agents and a tissue stimulant.

The dental liniment contains aconite in addition to two well known counter-irritants: iodine and chloroform. Aconite first irritates, causing stimulation, then depresses the sensory nerve endings, producing a tingling and numbness with analgesia. It is particularly useful in pericemental disturbances. Dry the surface before applying the preparation.

Prinz recommends the following formula to relieve symptoms of facial neuralgia:

℞	Metric	Apoth.
	Approx.	Equivalents
Menthol	4.0 Gm.	$\bar{5}$ i
Chloroform	8.0 cc.	$\bar{5}$ ii
Tr. Aconite g. s.	30.0 cc.	$\bar{5}$ i

Sig: Apply externally over painful areas of face and cover with cotton.

Phenol in the combinations given is a useful antiseptic agent.

Scarlet red produces a favorable influence in forming new tissue on denuded surfaces. A thin coat is all that is necessary.

Gentian violet has been recently used for the treatment of Vincent's infection. It appears to have marked germicidal properties.

Mercurchrome is sometimes useful as a substitute for Tr. of Iodine as a pre-operative skin disinfectant where the patient is sensitive to iodine. It does not cause irritation.

If you desire further information about the uses or concentrations of any of these substances call Humboldt 3-5670.

Very truly yours,
ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Prescriptions Series IX

COUNTER-IRRITANT

(a) ℞	Metric	Apoth.
	Approx.	Equivalents
Iodine	1.2 Gm.	gr. xviii ss
Chloroform	18.0 cc.	$\bar{5}$ iv ss
Fl. Ext. Aconite	15.0 cc.	$\bar{3}$ ss
Alcohol	21.0 cc.	$\bar{5}$ v m. xv
M.		

Sig: Dental Liniment (office use). Paint on with caution.

Note: Compound Dental Liniment of Aconite and Iodine, N. F.
Counter-irritant to gingiva.

* Selling prices are popular retail prices.

Write for Dentilin. Aconit. et Iodi Co.
Formula may be found in National For-
mulary VI, p. 96.
Caution: patient should not swallow
liniment.

Sig: Apply on denuded surface.
Note: Aids in growth of epithelium.
Write for by official title, Ung. Rubri
Scarlatini N. F., Scarlet Red Ointment.

ANTISEPTIC

(b) R̄	Metric Approx.	Apoth. Equivalents
Glycerite of Phenol, N. F.	30.0 Gm.	℥ i
Sig: Antiseptic agent. Dentists use.		
(c) R̄	Metric Approx.	Apoth. Equivalents
Phenol	18.0 Gm.	℥ ivss
Camphor	36.0 Gm.	℥ i ℥ iss
Liq. Petrolatum q. s. ad	60.0 cc.	℥ ii
M. Sig: Antiseptic Agent. Note: Phenol Camphoratum, N. F. Non-irritating to mucous membrane. Similar to Campho-Phenique.		

SCARLET RED OINTMENT

(d) R̄	Metric Approx.	Apoth. Equivalents
Scarlet Red N. F	1.5 Gm.	gr. xxiiss
Olive Oil	1.5 cc.	m. xxiii
Wool Fat	12.0 Gm.	℥ iii
Petrolatum q. s. ad	30.0 Gm.	℥ i

ANTISEPTIC

(e) R̄	Metric Approx.	Apoth. Equivalents
Methylrosanilini N. F.	0.9 Gm.	gr. xiv
Alcohol	3.0 cc.	m. xlviii
Aquae Dest q. s.	30.0 cc.	℥ i
M. Sig: Apply on infected surface. Note: Antiseptic against gram-positive bacteria, 3% solution. Write for by official title, Liq. Methyl- rosanilini N. F. Solution Gentian Violet, Crystal Violet, Methyl Violet. Stain removed by solution of sodium hypochlorite.		
(f) R̄	Metric Approx.	Apoth. Equivalents
Mercurochrome	0.6 Gm.	gr. ixss
Dist. Water	10.5 cc.	m. clx
Alcohol	15.9 cc.	℥ iv m. xvi
Acetone	3.0 cc.	m. xlviii
Sig: Mercurochrome Solution. Note: Preoperative skin disinfectant.		

Virus, Serum and Toxin Regulations

The United States Public Health Service has announced new regulations governing viruses, serums, toxins and analogous products. These regulations govern the licensing of establishments for the production of such products, the definition of biological products, inspections and manufacturing requirements. The regulations also cover the labeling of such products and the following information must appear on the outside label:

- (a) Name of manufacturer.
- (b) Address of manufacturer.
- (c) License number.
- (d) Proper name of product.
- (e) Minimum potency of product.
- (f) "No U. S. Standard of potency" if no such standard is established.
- (g) Lot number.
- (h) Date of manufacture or issue with period of potency; or the expiration date.

A Philadelphia physician in 1807 had a pharmacist prepare carbonated water flavored with fruit juice, for patients.—*Science News Letter*.

Chemical Exposition

The Chicago section of the American Chemical Society, which is sponsoring a chemical exposition to be held December 11th to 15th, inclusive, at the Stevens Hotel in Chicago, has arranged for an industrial chemical conference to be held during the exposition. A program of wide interest has been developed and full information may be obtained from the National Chemical Exposition, 110 N. Franklin St., Chicago.

Health Award

The B. F. Goodrich Company Award for distinguished service was presented to George McAueny, president of the American Museum of Health, at the World's Fair in New York on October 4th, in recognition of his "constructive efforts to extend the boundaries of public health education." The American Museum of Health is scheduled to open on the Fair site early next year, making its permanent home in the building occupied during the World's Fair by The Masterpieces of Art Museum.

New Remedies and Specialties

From the pharmaceutical journals of the world these abstracts are culled by a staff of scientists working as collaborators with the Editor of the Scientific Edition of THIS JOURNAL. They appear regularly in the Scientific Edition. Let us know if you desire to have them appear here regularly also.

NEW REMEDIES

Synthetics

Asafotin (Hageda, A. G., Berlin) contains in each tablet, sulfur (in the form of an organic compound) equivalent to 3 Gm. of fresh garlic. The characteristic odor of the crude drug is not apparent—the preparation being odorless and tasteless. It is indicated in the treatment of dyspepsia, flatulence, diarrhea, etc.—*Pharm. Zentralhalle*, 80 (1939), 566. (N. L.)

Calgluchin (Sandoz, A. G., Basel) is quinine-calcium-Sandoz, used in grippé and pneumonia.—*Pharm. Weekblad*, 76 (1939), 784. (E. H. W.)

Chinfortan (Chem.-pharmaz. A. G. Bad Homburg, Frankfurt a. M.) is a sterile solution containing solvochin and sulfanilamide. It is intended for injection and is recommended in the treatment of pneumonia.—*Pharm. Zentralhalle*, 80 (1939), 524. (N. L.)

Combex (Parke, Davis and Co., London and Sydney) contains in each capsule 1 mg. (333 International Units) of vitamin B₁ and 150 grams (60 Sherman Units) of vitamin B₂. The following recognized components of the B complex—B₁, B₄, B₅, B₆ and nicotinic acid (the pellagra-preventive factor)—are also present. It is used for the prophylaxis against general vitamin B deficiency. The dose is 2 to 6 capsules daily. It is marketed in bottles of 25 and 100.—*Australasian J. Pharm.*, 21 (1940), 360. (A. C. DeD.)

Cortenil (Bayer, I. G. Farbenindustrie A.-G., Leverkusen a. Rh.) is a synthetically prepared suprarenal cortex hormone. It is marketed in the form of ampuls, each containing the equivalent of 5 mg. desoxycorticosterone acetate. It is intended for the treatment of Addison's disease, muscular weakness, diphtheria, pneumonia, tuberculosis, grippé, etc.—*Pharm. Zentralhalle*, 80 (1939), 525. (N. L.)

Dépot-Insuline (I. G. Bayer & Co.) contains the insulin complex in suspension and not in solution. The tissue fluids gradually bring the insulin into solution after injection, after which resorption follows. The blood sugar value therefore undergoes no sudden changes whereby the patient tolerates the injection better and feels more comfortable.—*Pharm. Weekblad*, 76 (1939), 784. (E. H. W.)

Depropanex (Sharp & Dohme, Philadelphia, Pa.) is a saline solution of a chemically-derived, protein-free nitrogenous fraction obtained from an acid-alcohol treatment of beef pancreas. It is used in the treatment of intermittent claudication; to promote ureteral relaxation and dilatation for the relief of renal colic due to stone, stricture, kink and spasm; in post-cystoscopic colic; to facilitate the passage of the catheter beyond ureteral stone; in-

strument removal in calculi in lower ureter; and dilatation of organic ureteral stricture. Depropanex should be injected intramuscularly in doses between 2 cc. and 3 cc. every other day, depending on the severity of the condition and the response of the patient. It is supplied in packages containing one 10-cc. vial.—*Amer. Professional Pharmacist*, 6 (1940), 383. (F. J. S.)

D. O. C. A. (Desoxycorticosterone Acetate) (N. V. Organon, Oss) is a synthetically obtained compound possessing the action of cortin. It is obtainable in bottles containing 5 cc. (5 mg. per cc.) and in ampuls containing a solution of 2 mg. per cc.—*Pharm. Weekblad*, 76 (1939), 784. (E. H. W.)

Eufemyl Dragées (Temmler-Werke, Berlin) contain in each dragée, 0.1 Gm. desiccated mammary substance. It is indicated in the treatment of dysmenorrhea, etc.—*Pharm. Zentralhalle*, 80 (1939), 567. (N. L.)

Gestyl Organon (Organon Laboratories, London) is the gonadotrophic hormone from the serum of pregnant mares, issued as a sterile powder mixed with sodium chloride in capsules containing 40 R. U. with a twin ampul of solvent consisting of sterile 0.3% aqueous solution of trieresol. It is used in cases of menstrual disorder and sterility. It is given as deep intramuscular injection. It is supplied in boxes of 3, 6 and 12 twin capsules.—*Australasian J. Pharm.*, 21 (1940), 360. (A. C. DeD.)

Glycine Hydrochloride Compound (Schieffelin & Co., 16 Cooper Square, New York) contains in each capsule glycine hydrochloride (0.19 Gm.) which is sufficient to liberate, in solution, hydrochloric acid equivalent to 10 mms. of dilute hydrochloric acid U. S. P. It is used in the treatment of those cases in which hydrochloric acid therapy is required (dyspepsia with low gastric acidity, pernicious anemia of which achylia gastrica is a characteristic feature, diarrheas attended with marked putrefactive processes, certain allergic symptoms, etc.). It is supplied in bottles of 20, 100, 500 and 1000 capsules.—*Amer. Professional Pharmacist*, 6 (1940), 314. (F. J. S.)

Iriconvall (H. Köhler, Berlin) is a pure convallaria preparation made from the fresh plant by a special process. It is recommended as a cardiac tonic.—*Pharm. Zentralhalle*, 80 (1939), 567. (N. L.)

Neo-Hombreol-Propionatzalf (N. V. Organon, Oss). This ointment contains testosterone propionate as the active constituent. Cutaneous application of this preparation seems to have met with success since it may be applied to the patient to replace the usual ampuls intended for intramuscular injection. Each tube contains 50 mg. of testosterone propionate (T. P.). The skin is cleaned with alcohol or soap and water, and the ointment rubbed

in until it is all absorbed; application being made on the skin of the chest, abdomen or thighs. The hands used to make the application are not cleaned for two hours to insure the absorption of the ointment constituents upon them. One-half tube is applied daily at the beginning of the treatment and after 2 to 3 weeks somewhat less. The tubes contain 25 Gm. of ointment. There are also tubes of a concentrated ointment on the market containing 2 Gm.—*Pharm. Weekblad*, 76 (1939), 1137.

(E. H. W.)

Nicotinamide (Abbott Laboratories, North Chicago, Ill.) is the amide of pyridine-3-carboxylic acid, a derivative of nicotinic acid. It is indicated for the treatment of pellagra and chronic gastrointestinal disease which may seriously interfere with the ability of the intestine to absorb nicotinic acid from food. In the latter cases, the ampul solution, administered parenterally, is recommended. Nicotinamide supplies the nicotinic acid effect without producing the cutaneous flushing abdominal or cerebral symptoms often following the administration of nicotinic acid. It is supplied in ampuls, each 2 cc., containing 100 mg. of nicotinamide, in boxes of 6 and 25; in 50-mg. tablets in bottles of 25 and 100; and the elixir, 50 mg. to each fluidram, in bottles of 4 and 12 fluidounces.—*Amer. Professional Pharmacist*, 6 (1940), 385.

(F. J. S.)

Nipectin (Eli Lilly and Co. Ltd., Basingstoke, Eng.) is a nickel-pectin compound (0.15% of nickel). It is used orally in diarrhea and dysentery. It is administered in cereal, soup, milk, etc.; 1 to 4 tablespoons three times daily, or up to every three hours. It is marketed in 4-oz. (avoird.) package.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Oreton-F Toplicators (Schering Corporation, Bloomfield, N. J.) are hermetically-sealed plixofilm envelopes, each containing 4 mg. of crystalline testosterone (male sex hormone) in 2 Gm. ointment base. They are indicated in the milder cases of testicular deficiency that do not require intensive therapy. They are supplied in boxes of 25 toplicators.—*Amer. Professional Pharmacist*, 6 (1940), 181.

(F. J. S.)

Praequine (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, England) is the salt of a synthetic quinoline derivative (8-diethylamino-isopentyl-amino-6-methoxy quinoline). It is used as a malaria prophylactic (destroys the gametocytes of all types of malarial parasites). It is administered after quinacrine treatment to prevent relapse. The dose should be followed strictly as prescribed by the physician. It is marketed in bottles of 25 × 0.01-gram tablets.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Progesterone (The Upjohn Co., Kalamazoo, Michigan) consists of pure synthetic crystalline corpus luteum hormone dissolved in sweet almond oil and each cc. contains progesterone 1 mg. (1 I. U.), $C_{21}H_{30}O_2$. It is indicated in threatened and habitual abortion and in menstrual disturbances due to failure of formation of corpus luteum. The dose is $\frac{1}{2}$ to 2 mg. intramuscularly. Progesterone is supplied in boxes of two 1-cc ampuls and twenty-five 1-cc. ampuls.—*Amer. Professional Pharmacist*, 6 (1940), 314.

(F. J. S.)

Prokayvit (The British Drug Houses Ltd., London) is 2-methyl-1:4-naphthoquinone (a synthetic chemically related to vitamin K). It is used in cases of obstructive jaundice, neonatal hemorrhage, sprue and coeliac disease, liver disorders, during preg-

nancy. It is given as intramuscular injection. It is marketed in boxes of 6 × 1-cc. ampuls, each containing 5 mg. of the above substance in oily solution.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Quinacrine (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, England) is the dihydrochloride of a synthetic acridine derivative (2-chloro-7-methoxy-5-diethylamino-isopentylamino acridine). It has a marked schizontocidal action in malaria. The dose is $\frac{1}{2}$ to 3 tablets per day, according to age; ground in water or milk, and divided in three portions, each given at mealtime. It is marketed in bottles of 25 × 0.10-gram tablets. Quinacrine soluble for intramuscular or subcutaneous injection will be available shortly.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Uropac (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, near London) is the disodium salt of 3:5-di-iodo-4-pyridoxyl-N-methyl-2:6-dicarboxylic acid. It is used as a contrast medium in intravenous urography and other radiographic investigations. It is marketed in single ampuls containing 20 cc. of a sterile 75% solution.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Vitamin K Concentrate (E. R. Squibb & Sons, 745 Fifth Ave., New York) obtained from alfalfa, is dissolved in corn oil and supplied in capsule and fluid form. It is biologically standardized in Ansbacher units. It is indicated for the prevention and control of the hemorrhagic diathesis due to a lowered prothrombin content of the blood. The dosage is four capsules or 2 cc. orally to the mother for four days before expected delivery in order to prevent hemorrhage in the newborn; for hemorrhage in the newborn, 0.5 cc. to the infant at delivery or within 72 hours; in obstructive jaundice, for prophylaxis, four capsules or 2 cc. orally daily for three to five days prior to the operation, together with 2 or 3 bile salt tablets four times daily. The solution should not be given by injection. Vitamin K Concentrate is supplied in capsules (containing at least 500 Ansbacher units each, in bottles of 25) and solution (20-cc. bottles, each cc. containing at least 1000 Ansbacher units).—*Amer. Professional Pharmacist*, 6 (1940), 180.

(F. J. S.)

Specialties

A-D Percomorph Liver Oil (Abbott Laboratories, North Chicago, Ill.) is a blend of refined liver oils from fishes of the order *Percomorphi*, adjusted by the addition of cod liver oil to contain 85,000 U. S. P. units of vitamin A and 8500 U. S. P. units of vitamin D per gram. It is indicated in certain cases in children where cod liver oil has been shown to be beneficial in improving the general state of nutrition; where the patient objects to the large doses of cod liver oil or where oils and fats are not well tolerated in the intestine; also, in the treatment of night blindness and other manifestations of vitamin A deficiency and in the treatment of rickets, spasmophilia and osteomalacia. The daily prophylactic infant dose is 10 drops (0.2 cc.) and the same dosage is suited for children and adults. It is supplied in 10-cc. and 50-cc. dropper bottles.—*Amer. Professional Pharmacist*, 6 (1940), 383.

(F. J. S.)

Benevol Foot Powder (Labor. C. Viertel, Chemnitz) is a powder containing a salicylic acid derivative, but is free from starch and formalin. It is

recommended in the care of weak and sudorific conditions of the feet.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

Betaxin Syrup (Winthrop Chemical Co., Inc., 170 Varick St., New York) is a palatable, citrus-flavored, non-alcoholic, fluid preparation of vitamin B₁, containing 6 mg. (2000 U. S. P. units) of crystalline vitamin B₁ per fluidounce, or 0.75 mg. (250 U. S. P. units) per teaspoonful (4 cc.). It is used for prophylactic and therapeutic use in all cases where vitamin B₁ is indicated; and may also be employed as vehicle for certain commonly prescribed drugs. The dosage is as follows: prophylactic, one-half teaspoonful (125 U. S. P. units) daily for infants and small children, and twice this amount for older children; adults, one to two teaspoonful daily. Betaxin Syrup is supplied in 8-oz., 32-oz. and gallon bottles.—*Amer. Professional Pharmacist*, 6 (1940), 315. (F. J. S.)

Boviserin (Behringswerke, Marburg) is a normal beef serum, not intended for injection but for oral use.—*Pharm. Weekblad*, 76 (1939), 784. (E. H. W.)

Carbangin (Pharmakeia, Fabrik pharm. Präparate, Apotheker E. Sommerer, Berlin) is a coffee-kola powder. It is recommended in the treatment of angina, cholecystitis, etc.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

Cardiazol Tablets with Dextrose (Chem. Fabrik Knoll A. G., Ludwigshafen a. Rh.) contain in each tablet 0.05 Gm. cardiazol and dextrose and have a characteristic lemon flavor. It is indicated in circulatory collapse.—*Pharm. Zentralhalle*, 80 (1939), 524. (N. L.)

Cedilanid (J. Flint, Sandoz Products, London) is a glycoside from *Digitalis lanata*. It is used in heart failure due to myocardial insufficiency and disturbance of rhythm. The dose as tablets: 1-2 tablets three times daily; solution: $\frac{1}{15}$ - $\frac{1}{3}$ cc. (7-15 drops) three times daily; suppositories: 1 suppository twice daily; ampuls 2-4 cc. intravenously daily. It is marketed as tablets (0.00025 Gm.): bottles of 40, 250 and 500; solution (1 cc. = 30 drops = 0.001 Gm.): bottles of 10 and 100 cc.; suppositories (0.001 Gm.): boxes of 6; ampuls 2 cc. (0.0004 Gm.): boxes of 6 and 30; ampuls 4 cc. (0.0008 Gm.): boxes of 6 and 30.—*Australasian J. Pharm.*, 21 (1940), 360. (A. C. DeD.)

Cilausik (Bika, Chem.-pharmaz. Fabrik, Stuttgart) consists chiefly of rosin, eugenol, phenol, camphor, thymol, oil of laurel, oil of eucalyptus, oil of citron and zinc oxide.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

Diostate (The Upjohn Company, Kalamazoo, Michigan) contains in each tablet approximately 5 grains of dicalcium phosphate and $2\frac{1}{2}$ grains of natural calcium phosphates with traces of the elements iron, copper, fluorine, zinc and magnesium (nine tablets approximate the calcium and phosphorus content of one quart of milk). It is used to supplement the intake of calcium and phosphorus, especially of children, expectant and lactating mothers. The dose of Diostate is three to nine tablets daily; and it is supplied in bottles of 100 and 1000 tablets.—*Amer. Professional Pharmacist*, 6 (1940), 385. (F. J. S.)

Dorital (C. F. Boehringer & Sons, Mannheim) is a remedy against hypertension, increased blood pressure from arteriosclerosis. It is found on the market in tablets, containing 0.15 Gm. Fel Tauri Depurat., 0.015 Oxyulfonal, 0.00025 Gm. Atropinum Methy-

obrom. and 0.11 Gm. Monoformias Calcicus per tablet. The addition of bile to the hypnotic is based on the premise that it is the connecting link between liver function and circulation. Oxyulfonal is chosen because it is more soluble than sulfonal and is thus secreted more rapidly. The dose is 2 dragées three times a day which is later reduced to 1 dragée.—*Pharm. Weekblad*, 76 (1939), 784. (E. H. W.)

Esiderm with Sulfur (Desitin-Werk C. Klinke, Hamburg) contains zinc oxide, Venetian talc, siliceous earth, glycerin and distilled water in combination with 10% precipitated sulfur. The mixture is marketed in a colloidal form and is indicated in the treatment of eczema.—*Pharm. Zentralhalle*, 80 (1939), 510. (N. L.)

Ferromin with Liver Concentrate (McNeil Laboratories, Inc., 2900 N. 17th St., Philadelphia) contains in each capsule excised ferrous sulfate 2 gr., thiamin hydrochloride not less than 50 units and liver extract $2\frac{1}{2}$ gr. (representing 50 gr. of fresh liver substance). It is used in secondary anemia, anorexia, convalescence, nutritional deficiencies; particularly for growing children and in pregnancy and senility. It is not indicated in pernicious anemia. The dose of Ferromin with Liver Concentrate is two capsules with water three times a day after meals; and it is supplied in boxes of 100 capsules.—*Amer. Professional Pharmacist*, 6 (1940), 382. (F. J. S.)

Granaya and Granaya with Cascara (E. R. Squibb & Sons, 745 Fifth Ave., New York) is a palatable flavored preparation of cleaned karaya gum granules, plain or combined with cascara sagrada. It is used as a laxative, particularly in spastic and in other forms of chronic constipation; pre- and post-operatively; and for constipation associated with such conditions as hemorrhoids or pregnancy. The dose is as follows: Granaya, 1 or 2 teaspoonsful after meals; Granaya with Cascara, 1 teaspoonful after meals or 2 teaspoonsful at bedtime. It is supplied in 4-oz., 10-oz., and $1\frac{1}{2}$ -lb. bottles.—*Amer. Professional Pharmacist*, 6 (1940), 315. (F. J. S.)

Haemozel Liquor (Labor. "Zely" der Kreuzberg-Apotheke, Berlin) consists chiefly of rhubarb, frangula, aloes, cinnamon, galanga, cardamom seed and a wine base. It is used in the treatment of hemorrhoids.—*Pharm. Zentralhalle*, 80 (1939), 540. (N. L.)

Hepracton B (E. Merck, Darmstadt) is a highly active liver extract intended for injection. It contains lactoflavin and 0.1% vitamin B₁. It is indicated in the treatment of pernicious anemia.—*Pharm. Zentralhalle*, 80 (1939), 510. (N. L.)

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in until it is all absorbed; application being made on the skin of the chest, abdomen or thighs. The hands used to make the application are not cleaned for two hours to insure the absorption of the ointment constituents upon them. One-half tube is applied daily at the beginning of the treatment and after 2 to 3 weeks somewhat less. The tubes contain 25 Gm. of ointment. There are also tubes of a concentrated ointment on the market containing 2 Gm.—*Pharm. Weekblad*, 76 (1939), 1137.

(E. H. W.)

Nicotinamide (Abbott Laboratories, North Chicago, Ill.) is the amide of pyridine-3-carboxylic acid, a derivative of nicotinic acid. It is indicated for the treatment of pellagra and chronic gastrointestinal disease which may seriously interfere with the ability of the intestine to absorb nicotinic acid from food. In the latter cases, the ampul solution, administered parenterally, is recommended. Nicotinamide supplies the nicotinic acid effect without producing the cutaneous flushing abdominal or cerebral symptoms often following the administration of nicotinic acid. It is supplied in ampuls, each 2 cc., containing 100 mg. of nicotinamide, in boxes of 6 and 25; in 50-mg. tablets in bottles of 25 and 100; and the elixir, 50 mg. to each fluidram, in bottles of 4 and 12 fluidounces.—*Amer. Professional Pharmacist*, 6 (1940), 385.

(F. J. S.)

Nipectin (Eli Lilly and Co. Ltd., Basingstoke, Eng.) is a nickel-pectin compound (0.15% of nickel). It is used orally in diarrhea and dysentery. It is administered in cereal, soup, milk, etc.; 1 to 4 tablespoons three times daily, or up to every three hours. It is marketed in 4-oz. (avoird.) package.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Oreton-F Toplicators (Schering Corporation, Bloomfield, N. J.) are hermetically-sealed pliofilm envelopes, each containing 4 mg. of crystalline testosterone (male sex hormone) in 2 Gm. ointment base. They are indicated in the milder cases of testicular deficiency that do not require intensive therapy. They are supplied in boxes of 25 toplicators.—*Amer. Professional Pharmacist*, 6 (1940), 181.

(F. J. S.)

Praequine (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, England) is the salt of a synthetic quinoline derivative (8-diethylamino-isopentyl-amino-6-methoxy quinoline). It is used as a malaria prophylactic (destroys the gametocytes of all types of malarial parasites). It is administered after quinaquine treatment to prevent relapse. The dose should be followed strictly as prescribed by the physician. It is marketed in bottles of 25 × 0.01-gram tablets.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Progesterone (The Upjohn Co., Kalamazoo, Michigan) consists of pure synthetic crystalline corpus luteum hormone dissolved in sweet almond oil and each cc. contains progesterone 1 mg. (1 I. U.), $C_{21}H_{30}O_2$. It is indicated in threatened and habitual abortion and in menstrual disturbances due to failure of formation of corpus luteum. The dose is $\frac{1}{2}$ to 2 mg. intramuscularly. Progesterone is supplied in boxes of two 1-cc ampuls and twenty-five 1-cc. ampuls.—*Amer. Professional Pharmacist*, 6 (1940), 314.

(F. J. S.)

Prokayvit (The British Drug Houses Ltd., London) is 2-methyl-1:4-naphthoquinone (a synthetic chemically related to vitamin K). It is used in cases of obstructive jaundice, neonatal hemorrhage, sprue and coeliac disease, liver disorders, during preg-

nancy. It is given as intramuscular injection. It is marketed in boxes of 6 × 1-cc. ampuls, each containing 5 mg. of the above substance in oily solution.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Quinacrine (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, England) is the dihydrochloride of a synthetic acridine derivative (2-chloro-7-methoxy-5-diethylamino-isopentylamino acridine). It has a marked schizontocidal action in malaria. The dose is $\frac{1}{2}$ to 3 tablets per day, according to age; ground in water or milk, and divided in three portions, each given at mealtime. It is marketed in bottles of 25 × 0.10-gram tablets. Quinacrine soluble for intramuscular or subcutaneous injection will be available shortly.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Uropac (Pharmaceutical Specialties (May and Baker Ltd.), Dagenham, near London) is the disodium salt of 3:5-di-iodo-4-pyridoxyl-*N*-methyl-2:6-dicarboxylic acid. It is used as a contrast medium in intravenous urography and other radiographic investigations. It is marketed in single ampuls containing 20 cc. of a sterile 75% solution.—*Australasian J. Pharm.*, 21 (1940), 360.

(A. C. DeD.)

Vitamin K Concentrate (E. R. Squibb & Sons, 745 Fifth Ave., New York) obtained from alfalfa, is dissolved in corn oil and supplied in capsule and fluid form. It is biologically standardized in Ansbacher units. It is indicated for the prevention and control of the hemorrhagic diathesis due to a lowered prothrombin content of the blood. The dosage is four capsules or 2 cc. orally to the mother for four days before expected delivery in order to prevent hemorrhage in the newborn; for hemorrhage in the newborn, 0.5 cc. to the infant at delivery or within 72 hours; in obstructive jaundice, for prophylaxis, four capsules or 2 cc. orally daily for three to five days prior to the operation, together with 2 or 3 bile salt tablets four times daily. The solution should not be given by injection. Vitamin K Concentrate is supplied in capsules (containing at least 500 Ansbacher units each, in bottles of 25) and solution (20-cc. bottles, each cc. containing at least 1000 Ansbacher units).—*Amer. Professional Pharmacist*, 6 (1940), 180.

(F. J. S.)

Specialties

A-D Percomorph Liver Oil (Abbott Laboratories, North Chicago, Ill.) is a blend of refined liver oils from fishes of the order *Percomorphi*, adjusted by the addition of cod liver oil to contain 85,000 U. S. P. units of vitamin A and 8500 U. S. P. units of vitamin D per gram. It is indicated in certain cases in children where cod liver oil has been shown to be beneficial in improving the general state of nutrition; where the patient objects to the large doses of cod liver oil or where oils and fats are not well tolerated in the intestine; also, in the treatment of night blindness and other manifestations of vitamin A deficiency and in the treatment of rickets, spasmophilia and osteomalacia. The daily prophylactic infant dose is 10 drops (0.2 cc.) and the same dosage is suited for children and adults. It is supplied in 10-cc. and 50-cc. dropper bottles.—*Amer. Professional Pharmacist*, 6 (1940), 333.

(F. J. S.)

Benevol Foot Powder (Labor. C. Viertel, Chemnitz) is a powder containing a salicylic acid derivative, but is free from starch and formalin. It is

commended in the care of weak and sudorific conditions of the febrile.—*Pharm. Zentralhalle*, 80 (1939), 99. (N. L.)

Betaxin Syrup (Winthrop Chemical Co., Inc., 170 Varick St., New York) is a palatable, citrus-flavored, non-alcoholic, fluid preparation of vitamin B₁, containing 6 mg. (2000 U. S. P. units) of crystalline vitamin B₁ per fluidounce, or 0.75 mg. (250 U. S. P. units) per teaspoonful (4 cc.). It is used for prophylactic and therapeutic use in all cases where vitamin B₁ is indicated; and may also be employed as vehicle for certain commonly prescribed drugs. The dosage is as follows: prophylactic, one-half teaspoonful (125 U. S. P. units) daily for infants and small children, and twice this amount for older children; adults, one to two teaspoonful daily. Betaxin Syrup is supplied in 8-oz., 32-oz. and gallon bottles.—*Amer. Professional Pharmacist*, 6 (1940), 315. (F. J. S.)

Boviserin (Behringswerke, Marburg) is a normal beef serum, not intended for injection but for oral use.—*Pharm. Weekblad*, 76 (1939), 784.

(E. H. W.)

Carbangan (Pharmakeia, Fabrik pharm. Präparate, Apotheker E. Sommerer, Berlin) is a coffee-kola powder. It is recommended in the treatment of angina, cholecystitis, etc.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

Cardiazol Tablets with Dextrose (Chem. Fabrik Knoll A. G., Ludwigshafen a. Rh.) contain in each tablet 0.05 Gm. cardiazol and dextrose and have a characteristic lemon flavor. It is indicated in circulatory collapse.—*Pharm. Zentralhalle*, 80 (1939), 524. (N. L.)

Cedilanid (J. Flint, Sandoz Products, London) is a glycoside from *Digitalis lanata*. It is used in cardiac failure due to myocardial insufficiency and disturbance of rhythm. The dose as tablets: 1-2 tablets three times daily; solution: 1/4-1/2 cc. (7-15 drops) three times daily; suppositories: 1 suppository twice daily; ampuls 2-4 cc. intravenously daily. It is marketed as tablets (0.00025 Gm.); bottles of 40, 250 and 500; solution (1 cc. = 30 drops = 0.001 Gm.); bottles of 10 and 100 cc.; suppositories (0.001 Gm.); boxes of 6; ampuls 2 cc. (0.0004 Gm.); boxes of 6 and 30; ampuls 4 cc. (0.0008 Gm.); boxes of 6 and 30.—*Australasian J. Pharm.*, 21 (1940), 360. (A. C. DeD.)

Cilausik (Bika, Chem.-pharmaz. Fabrik, Stuttgart) consists chiefly of rosin, eugenol, phenol, camphor, thymol, oil of laurel, oil of eucalyptus, oil of citron and zinc oxide.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

Diostate (The Upjohn Company, Kalamazoo, Michigan) contains in each tablet approximately 5 grains of dicalcium phosphate and 2 1/2 grains of natural calcium phosphates with traces of the elements iron, copper, fluorine, zinc and magnesium (nine tablets approximate the calcium and phosphorus content of one quart of milk). It is used to supplement the intake of calcium and phosphorus, especially of children, expectant and lactating mothers. The dose of Diostate is three to nine tablets daily; and it is supplied in bottles of 100 and 1000 tablets.—*Amer. Professional Pharmacist*, 6 (1940), 385. (F. J. S.)

Dorital (C. F. Boehringer & Sons, Mannheim) is a remedy against hypertension, increased blood pressure from arteriosclerosis. It is found on the market in tablets, containing 0.15 Gm. Fel Tauri Depurat., 0.015 Oxysulfonal, 0.00025 Gm. Atropinum Methyl-

obrom. and 0.11 Gm. Monoformias Calcicus per tablet. The addition of bile to the hypnotic is based on the premise that it is the connecting link between liver function and circulation. Oxysulfonal is chosen because it is more soluble than sulfonal and is thus secreted more rapidly. The dose is 2 dragées three times a day which is later reduced to 1 dragée.—*Pharm. Weekblad*, 76 (1939), 784.

(E. H. W.)

Esiderm with Sulfur (Desitin-Werk C. Klink, Hamburg) contains zinc oxide, Venetian talc, siliceous earth, glycerin and distilled water in combination with 10% precipitated sulfur. The mixture is marketed in a colloidal form and is indicated in the treatment of eczema.—*Pharm. Zentralhalle*, 80 (1939), 510. (N. L.)

Ferromin with Liver Concentrate (McNeil Laboratories, Inc., 2900 N. 17th St., Philadelphia) contains in each capsule exciccated ferrous sulfate 2 gr., thiamin hydrochloride not less than 50 units and liver extract 2 1/2 gr. (representing 50 gr. of fresh liver substance). It is used in secondary anemia, anorexia, convalescence, nutritional deficiencies; particularly for growing children and in pregnancy and senility. It is not indicated in pernicious anemia. The dose of Ferromin with Liver Concentrate is two capsules with water three times a day after meals; and it is supplied in boxes of 100 capsules.—*Amer. Professional Pharmacist*, 6 (1940), 382. (F. J. S.)

Granaya and Granaya with Cascara (E. R. Squibb & Sons, 745 Fifth Ave., New York) is a palatable flavored preparation of cleaned karaya gum granules, plain or combined with cascara sagrada. It is used as a laxative, particularly in spastic and in other forms of chronic constipation; pre- and post-operatively; and for constipation associated with such conditions as hemorrhoids or pregnancy. The dose is as follows: Granaya, 1 or 2 teaspoonsful after meals; Granaya with Cascara, 1 teaspoonful after meals or 2 teaspoonsful at bedtime. It is supplied in 4-oz., 10-oz., and 1 1/2-lb. bottles.—*Amer. Professional Pharmacist*, 6 (1940), 315. (F. J. S.)

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A. Ph. A. Women's Auxiliary Launches Loan Fund

The Women's Auxiliary was formed many years ago, for purely social purposes, to help the women who accompanied their husbands to the annual meetings get acquainted.

In 1934, at the Washington, D. C., meeting, the first attempt was made to form a regular organization. The minutes were written up and together with the gavel were to be placed in the new home of American Pharmacy, "The Institute of Pharmacy," in Washington, D. C. Mrs. Lyman F. Kebler was the presiding officer.

In 1935, a few members assembled in Portland, Oregon, and decided to continue regular meetings annually.

In 1936, at Dallas, Texas, as a tribute for holding the organization together, Mrs. Lyman F. Kebler of Washington, D. C., was unanimously named honorary president. To carry on the Auxiliary, several donations were received amounting to \$9 00. Mrs. Robert P. Fischelis was elected President and Mrs. M. C. Fuhrmann, Secretary-Treasurer.

In 1937, at New York City, the first dues were collected, namely \$1.00 from each member.

1938 marked the real beginning. The president, Mrs. Robert P. Fischelis, proposed that the auxiliary assume a definite objective and suggested a Student Loan Fund. The proposal was approved and Mrs. Fischelis continued as president.

The year 1938-1939 was filled with activity in soliciting funds. \$1000.00 was the goal and the treasurer was proud to report, at the annual meeting at Atlanta Georgia in 1939, that the Student Loan Fund now amounted to \$842.00 in addition to the membership fund of \$206.00. At this meeting, new by-laws were adopted and definite rules set for making loans to students and their repayment. Forms for application blanks were devised.

In January 1940, application blanks were sent to some fifty colleges of pharmacy throughout the United States.

At Richmond, Virginia, in 1940 our dreams turned to reality. The goal of \$1000.00 had been reached, by several donations made at the final meeting of the A. Ph. A. At that moment the Auxiliary realized that \$1000.00 would not take care of many loans and then and there plans were made for a greater effort during 1940-1941, so as to raise the Student Loan Fund to \$10,000.00.

Mrs. Townes R. Leigh, of Gainesville, Florida, was elected chairman of the Loan Fund Board which body rules on all applications and through the treasurer administers the Student Loan Fund.

Mrs. F. S. Stoll, of Louisville, Kentucky, was appointed chairman of the Ways and Means Committee, to head the drive. The whole country was di-

vided into five districts, with district vice-presidents who will aid the chairman in her effort.

The Student Loan Fund is for women pharmacy students only, until enough money is available to also take care of men students. Junior and Senior students can send in their applications. The money is sent directly to the Financial Board of the college, since all loans must be applied toward tuition expenses and not personal needs. Notes must be given for the loan, endorsed by two responsible parties; interest rate is 3% per annum. Notes are payable in three installments, 20% the first year after graduation, 40% the second year and 40% the third year. The Auxiliary receives regular reports, both from the dean of the college and the student, at intervals during the year.

At the Richmond meeting, too, the first loan was made to a pretty, bright eyed youngster, Miss Ione R. Card of the University of Iowa, Iowa City. So—our good work has commenced—now it is up to the pharmacists of America to help us continue in the future. With thousands of pharmacists in the United States should it be such a hard task to raise \$10,000.00? WILL YOU HELP?

MRS. HUGO H. SCHAEFER, *Secretary*

READERS' COMMENT

A member writes: "The JOURNAL is of great interest and I enjoy it very much."

Another writes: "This new edition is really practical for application to daily work, and we have enjoyed it much."

"I receive both the Scientific and Practical Pharmacy editions and enjoy them very much," another states.

"If they happen to be in the retail business as I am," writes another member "I've had more good ideas from the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION than all the other publications together."

Another new member writes: "I wish to take this opportunity of thanking those who edit the JOURNAL for publishing so much information which is of such great value to those going to school. Unless one is in school one cannot realize how much these articles mean."

Labor Department Issues Regulations Affecting Professions

Following extended hearings held some months ago, new regulations have been promulgated by Philip B. Fleming, Administrator, Wage and Hour Division U. S. Department of Labor, defining and delimiting the terms "any employee employed in a bona fide executive, administrative, professional or local retailing capacity, or in the capacity of outside salesman," pursuant to Section 13 (a) (1) of the Fair Labor Standards Act.

These revised regulations became effective on October 24, 1940, and a professional employee is defined as follows:

"(A) engaged in work

"(1) predominantly intellectual and varied in character as opposed to routine mental, manual, mechanical or physical work, and

"(2) requiring the consistent exercise of discretion and judgment in its performance, and

"(3) of such character that the output produced or the result accomplished cannot be standardized in relation to a given period of time, and

"(4) whose hours of work of the same nature as that performed by nonexempt employees do not exceed twenty per cent of the hours worked in the work-week by the nonexempt employees; provided that where such nonprofessional work is an essential part of and necessarily incident to work of a professional nature, such essential and incidental work shall not be counted as nonexempt work; and

"(5) (a) requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study, as distinguished from a general academic education and from an apprenticeship, and from training in the performance of routine mental, manual or physical processes; or

"(b) predominantly original and creative in character in a recognized field of artistic endeavor as opposed to work which can be produced by a person endowed with general manual or intellectual ability and training, and the result of which depends primarily on the invention, imagination or talent of the employee, and

"(B) compensated for the services on a salary or fee basis at a rate of not less than \$200 per month (exclusive of board, lodging or other facilities); provided that this subsection (B) shall not apply in the case of an employee who is the holder of a valid license or certificate permitting the practice of law or medicine or any of their branches and who is actually engaged in the practice thereof "

Licensed pharmacists are classified as professionals under these revised regulations as outlined above.

It should be noted that the \$200 salary required does not apply to licensed pharmacists and that the regulations in general apply to articles in interstate commerce.

Red Cross Activity Saves Lives



In Red Cross war relief shipments to Europe have been great quantities of drugs, surgical instruments and hospital supplies. Concrete testimony that lives are being saved because of Red Cross activity is contained in the following cable received at national headquarters in Washington, August 23rd, from a representative in unoccupied France:

"Insulin from our existing supply here is filling an urgent need, emergency requests being met immediately and many reports of lives being saved. We are working out plan in cooperation with health authorities to meet all needs in unoccupied France for a period of from two to three months when our stocks will be exhausted. Also government agencies on our request are making a survey of existing supplies and sources. Situation well in hand. Will give you estimates for needs soon."

All Red Cross war relief activities are financed from the special fund raised last summer. Normal services at home are supported from low annual membership dues. The Red Cross faces increasing tasks and to meet all demands many new members are needed this year.

The annual Roll Call begins November 11th and ends November 30th. Everyone who joins a local chapter helps thus maintain Red Cross services to his community and nation.

National Program for Distributive Education for Druggists

Representatives from the pharmaceutical organizations referred to below attended a meeting held at the United States Office of Education, Federal Security Agency, in Washington, on September 21-22, under an invitation from B. Frank Kyker, Chief, Business Educational Service. The purpose of the meeting was to work out a National Program under which the various states could in turn develop a distributive educational program under the George-Deen Act.

The following pharmaceutical associations were represented:

N. A. R. D., by Editor George A. Bender; N. A. B. P., by George A. Bender, by proxy; A. A. C. P., by H. E. Kendig, President, and Ernest Little, Chairman, Executive Committee; A. Ph. A., by E. F. Kelly, Secretary, and L. M. Kantner, retail pharmacist of Baltimore.

The U. S. Office of Education was represented, in addition to Mr. Kyker, by regional agents and by state representatives. Dr. J. C. Wright, Assistant Commissioner for Vocational Education, welcomed those present in the name of the United States Office of Education.

The meeting included sessions on Friday forenoon, afternoon and evening, and on Saturday forenoon. It was the general opinion that the provisions of the George-Deen Act should be taken advantage of to the fullest extent and that it was necessary to include subjects in the field of professional pharmacy, since this type of information was necessary to more effective distribution and use. It was also decided that the distributive educational program for retail druggists need not conflict with refresher courses now being conducted by colleges of pharmacy. On the contrary it was felt that these two programs might be combined, in certain instances, to advantage.

Three Major Divisions

It seemed important to develop the program in such a way as to interest drug store operators, employee pharmacists and unregistered employees. In order to serve these three groups effectively, it was decided to develop an outline as follows:

(1) In the field of professional pharmacy, a "refresher" course covering recent developments of interest to the owner pharmacist and to employee pharmacists.

(2) In the field of store management and control, including modernization, subjects of interest to owner, to employee pharmacists and to some unregistered employees.

(3) In the field of merchandising subjects which

would appeal most strongly to the unregistered employees in perfecting their methods of selling.

Although it may be found necessary to include other divisions it was decided to provide for a sub-committee composed of those best qualified in each field to develop an outline covering the divisions and subjects referred to. This special committee will be organized as promptly as possible.

It was the general opinion of the pharmaceutical representatives that great progress had been made in several states and that a program can be developed for the guidance of the other states in organizing distributive educational programs to be given with the coöperation of the state and federal governments, under the provisions of the George-Deen Act.

Reduction in Tax on Alcohol Urged

Recent developments indicate that mutually satisfactory arrangements may be worked out to secure a clear-cut differentiation in taxation between alcohol used for beverage purposes and alcohol used for industrial purposes. The federal legislation provides for the encouragement of the use of industrial alcohol but, up to this time, the tax on industrial alcohol has been the same as the tax on beverage alcohol, except during the Great War when a differential was in effect for a period.

The AMERICAN PHARMACEUTICAL ASSOCIATION and the National Association of Retail Druggists have adopted resolutions for several years urging the reduction or the elimination of the tax on alcohol used for medicinal purposes under such safeguards as may be found necessary.

Rowland Jones, Jr., representing the N. A. R. D. and E. F. Kelly, representing the A. Ph. A. have joined with representatives of the Flavoring Extract Manufacturers and others in several conferences with federal officials during which information was submitted in support of the reduction of the tax. Under the recent revenue legislation, the tax was actually increased although strong protests were made against this action.

On Thursday, October 17th, a further conference was held with officials of the Alcohol Tax Unit of the Internal Revenue Department. Extensive evidence was given in support of a tax reduction and the representatives present, including Messrs. Jones and Kelly, were encouraged by the evident attitude to develop a workable plan. A permit system similar to that in effect during prohibition seems to be a necessary feature. This involves administrative difficulties and considerable expense. It is expected that the conferences will be continued and the A. Ph. A. will continue to coöperate because it believes that some relief from this tax burden is necessary for the pharmacists and for the people who must buy and use medicines.

Local and Student Branches

SOUTHERN COLLEGE OF PHARMACY STUDENT BRANCH.—The first business meeting of the new school year was held on October 14th. Mr. L. N. Turner, who was an officer last year, acted as temporary chairman.

There were several reasons why it was impossible to hold election of officers at the May meeting, so it was held at this meeting and resulted as follows: Mr. Tom Perkins, *president*; Otis Wells, Jr., *vice-president*; L. H. Turner, Jr., *treasurer*; and Evelyn Peacock, *secretary*.

Two communications were read, one from Dr. Ernest Little and one from President Charles Evans. The secretary was instructed to write and thank Dr. Little for his letter, especially the good news about the reduction in dues.

The Branch is very proud that a pharmacist of its own state is now president of the A. Ph. A., our parent organization. The secretary was instructed to write Mr. Evans and invite him to be the guest of the organization at a luncheon to be held some time during the early part of November.

Some thirty names were brought up before the Branch and all were voted in, pending payment of dues before January 1st.

A short talk was made by each of our faculty advisers, Dean R. C. Hood, Prof. E. W. Aldredge and Dr. Minnie M. Meyer, on the value of the A. Ph. A. to pharmacy.

EVELYN P. PEACOCK, *Secretary*

ALABAMA POLYTECHNIC STUDENT BRANCH.—On May 6th the entire Pharmacy Department attended the banquet sponsored by the Student Branch of the A. Ph. A. In addition to the students and faculty there were present local pharmacists: George Bayne, A. D. Lipscomb, Shell Toomer and Homer Wright.

The guest speaker was Dr. Roger Allen whose topic was "Vitamins." During the banquet the faculty addressed the group, and each pharmacist was called on to say a few words. Mr. Charles Edwards, registrar, and Mr. Ralph Draugh, secretary to the president of the college, were present and addressed the group also.

Samples obtained from various concerns and pharmaceutical houses were given to each student.

* * * * *

At the first meeting of the fall, Professor Hargreaves, faculty adviser, gave a most interesting talk on "What the A. Ph. A. Is, What It Can Do For You and What You Can Do For It." Dr.

Blake made a short talk to the freshmen, giving them an idea of what would be expected of them and suggesting that they pay particular attention to their studies. Professor Nickel urged everyone to aim at higher grades this year.

Rho Chi announced the tapping of two new members—Theron Donahue and J. M. Rash; and it also announced that Julius Cox was to receive the freshman scholarship medal.

Every student present stood, introduced himself and gave his home town and year in school.

Interest in the A. Ph. A. has increased considerably this year and most of the freshmen and new students have joined the society, and it is believed that soon every student will be a member.

* * * * *

The second meeting was called to order by the president, Charles Barron, the roll called and minutes read. A committee was appointed to investigate a key to be made for the members of the A. Ph. A.

Plans for Pharmacy Week were discussed.

Mr. A. D. Lipscomb, local druggist, brought out several ideas concerning substitution of brands of pharmaceutical preparations in his talk to the Society.

BETH M. MURPHY, *Secretary*

CITY OF WASHINGTON.—The April meeting was held in the Institute of Pharmacy on Thursday, April 18th, at 8 P.M. President Kenneth L. Kelly called the meeting to order and read the treasurer's report indicating a balance of \$142.68.

Mr. L. E. Warren made a motion to adopt the revised constitution; it was seconded by Dr. Taylor and passed.

Dean W. Paul Briggs presented the report of the nominating committee: for *President*, K. L. Kelly; *Vice-President*, L. W. Hazleton; *Secretary*, Charles O. Wilson; and *Treasurer*, W. T. McClosky. The nominees were voted in unanimously.

The program was devoted to talks on the United States Pharmacopoeia. Mr. Striner spoke on "Detailing Official Pharmaceuticals," outlining the plan used by the District of Columbia Pharmaceutical Association. Mr. L. E. Warren presented a paper on "Assays in the U. S. P.," giving a chronological history of the most important determinations.

CHARLES O. WILSON, *Secretary*

NEW YORK.—The first regular meeting was held at Columbia University, College of Pharmacy,

on October 14th. About one hundred members and guests were present. Minutes of the previous meeting were approved as read. The report of the treasurer was received.

Mr. F. C. A. Schaefer stated that the membership committee had no report, but hoped to have a long one at the next meeting.

Dr. Hugo H. Schaefer, secretary of the Remington Medal Committee, announced that preparations were under way for a testimonial dinner on November 28th, in honor of Dr. Robert L. Swain, for the purpose of presenting the Remington Honor Medal to him.

Mr. F. D. Lascoff spoke on the coming Pharmacy Week. He urged all retailers to obtain Pharmacy Week display cards from their wholesalers, free of charge, and to use them. Photographs of the windows should be sent to Mr. R. S. Lehman, secretary of the New York State Pharmaceutical Association for entry in the contest.

For the Scientific Section of the meeting, Dr. Fred B. Western, medical director of the Bilhuber-Knoll Corp., spoke on "The Place of Chemotherapy in Modern Treatment of Insanity," and Dr. S. Bernard Wortis, associate professor of neurology, New York University Medical College, spoke on "The Clinical Aspects of Insulin, Metrazol, Electrical Shock, and Nitrogen Inhalation Therapy in the Treatment of Schizophrenia."

After discussion of the papers, a rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

PHILADELPHIA.—The October meeting was held on October 8th, at Temple College of Pharmacy. Minutes of the May meeting were read and approved.

Chairman Leberknight introduced Dr. Fritz Laquer, research professor in biochemistry at the School of Pharmacy of Temple University, who had been affiliated with various European universities and pharmaceutical houses from 1920 to 1940. An abstract of his lecture follows:

The European pharmaceutical industry is divided into five geographical groups:

- (1) Central European Group—comprised mainly of Germany, Switzerland, the territories of former Austro-Hungarian Monarchy, the Scandinavian countries, Holland, etc. Among these, Germany and Switzerland play the leading role.
- (2) England and the British Empire—the pharmaceutical industry being located mainly in the British Isles, and Canada.
- (3) France and Belgium—with about 8 to 10 important companies.
- (4) Italy, where the organization of the pharmaceutical industry is about the same as in France.
- (5) All other countries of Europe.

A close cooperation exists between the university

scientists and the pharmaceutical industry in the central European group. The scientists frequently act as permanent advisers and occasionally serve on the board of trustees of the companies, while the industries aid the universities by grants and also by the use of their large equipment. A few instances in which the industry aided the scientists were:

- (1) supporting an expedition to study the effect of medicaments in tropical disease.
- (2) isolation of active ingredients from their natural source, e. g., B₁ from rice polishings, female sex hormones from pregnancy urine and testosterone from bull testes.

This cooperation between the universities and the pharmaceutical industry is only beginning to exist in England.

The speaker then stated that the research process was very much the same in Europe as in this country, in that the scientists frequently develop a variety of organic compounds after first learning the chemical structure of clinically important, naturally occurring substances. Of the many synthetic compounds made, he estimated that only about 10% are physiologically active and of these only a small fraction ever gain clinical importance.

Dean Kendig reported on the status of pharmacists in relation to the national defense program. He recommended that all pharmacists register with the Red Cross, stating that this would enhance their chance of serving the defense program in a technical capacity in case they were called. Information and application blanks may be obtained from the local secretary or by writing directly to Mr. Walter Davidson, American Red Cross, Washington, D. C.

R. H. BLYTHE, *Secretary*

Individualists

Dr. George L. Webster of the Illinois College of Pharmacy, in an article in the August 15, 1940 issue of the *N. A. R. D. Journal*, declares that as a practitioner of his profession, the pharmacist is an individualist. "This is necessary by the very nature of his service," he says. "Just as each prescription written by a physician is an individual medication for a particular set of symptoms, so each prescription filled by the pharmacist demands his immediate personal supervision. The filling of prescriptions cannot be done on an assembly line. Each one represents a special problem demanding the full attention of an individual from its beginning until it is ready for the patient."

Paprika, which is now difficult to obtain from Spain, Yugoslavia and Hungary, has been grown successfully in test plantings in Louisiana and Florida.—*Science News Letter*.

IN THE NEWS

Kenneth D. Bailey, of Morgantown, W. Va., won the membership prize in the AMERICAN PHARMACEUTICAL ASSOCIATION for the best set of drawings in the course in vegetable histology, offered by the West Virginia Pharmaceutical Association, recently. The membership covers two years.

Dr. Robert L. Swain will receive the Remington Honor Medal at a dinner on November 28th, in the Hotel Pennsylvania. This dinner is given by the New York Branch, and the president of the branch, Rudolf O. Hauck, will preside. Dr. Swain is the 19th recipient.

Floyd Nichols, of Kalamazoo, Mich., a World War veteran, has enlisted again in the same detachment in which he served in the World War overseas.

Miss Edith C. Schmitz, of Platteville, Wis., is celebrating her 21st anniversary of drug store proprietorship. She was the city's first woman pharmacist.

Dean Mariano V. Del Rosario, of Manila, P. I., is considered an expert in the field of hydrotherapy, and has made special study of the natural springs baths of the Islands. Dr. Del Rosario is a native of Manila but studied in America. He has been on the faculty of the college since 1912.

Dr. H. A. B. Dunning, of Baltimore, Md., has donated to the A. P. H. A. Museum a plain glass retort which is more than a century old.

John D. Dwyer, graduate assistant in botany at Fordham University, and Dr. H. A. Gleason, Head Curator of the New York Botanical Garden, covered over 6500 miles this summer on a collecting trip which took in a number of States and resulted in some new discoveries. Over 4000 specimens were collected, and duplicates will be deposited in the herbarium of Fordham University.

Dr. William J. Bonisteel, professor of botany at Fordham University, has been appointed editor of *Torrey*, the bimonthly journal of the Torrey Botanical Club, and will assume his new duties with the January issue of the journal.

American Chemical Society.—At the Detroit Convention of the American Chemical Society four new chemicals were announced—wall paint which kills germs; a terrific explosive; electrical weaving, and the first step in synthetic quinine from oil wells. The latter discovery, vital in war, was reported by Dr. H. B. Haas and Dr. H. C. Huffman, of Purdue University. Out of natural gas and

other oil-well gases they make a molecule known to be essential in producing synthetic quinines, atabrin and plasmochin.

Pharmacists in the vicinity of the Hercules powder plant, in Kenil, N. J., which suffered a terrific explosion recently were true to their colors. They rushed medicinals to hospitals, arranged for quick dispatch of all first aid supplies and volunteered for duty at the hospitals and with ambulance units.

The George Washington University School of Pharmacy, Washington, D. C., will occupy its new building this fall, housing a pharmacology research laboratory, equipped by the District of Columbia Pharmaceutical Association in memory of former Dean H. E. Kalusowski.

The National Wholesale Druggists Association convention was held in White Sulphur Springs, W. Va., September 28th to October 2nd. Among the speakers was Dean R. C. Wilson, University of Georgia, whose subject was "A Continuing Program of Education for Pharmacists."

Fordham University, the first catholic college and university in New York, began its one hundredth year when classes opened in September, marking a century of progress of catholic higher education in the Archdiocese. In the intervening five generations, Fordham has grown from a little group of six students who came to study in the Rose Hill manor house in 1841 to a university of more than eight thousand students, with eight different schools, including a school of pharmacy, occupying thirteen buildings on the seventy-acre campus and three entire floors in the Woolworth Building in lower New York.

Canadian pharmacists who have joined the Canadian Active Service Corps, and who are now in England, are finding that the pharmacists of Great Britain are a very friendly and hospitable group. They also find that visiting the various stores and manufacturers is a valuable experience.

S. B. Penick & Co., of New York City, have donated to the A. P. H. A. Library "Estrogenic Hormones in Endocrine Gynecology." This is a review of fundamental and recent contributions in the field of endocrine gynecology. A bibliography of 130 recent references is included.

The Council of the Pharmaceutical Society of Great Britain has set up a war aid service to which all problems confronting pharmacists by reason of the war will be referred.

Visitors.—During August the following visited the AMERICAN INSTITUTE OF PHARMACY: Mr. and Mrs. W. Wilson McNeary, Philadelphia, Pa.; C. L. Goodwin, Long Island, N. Y.; William Brown, M.D., Long Island City, N. Y.; Frances Verspoor, Edward DeKoning and Mrs. D. C. DeKoning, West Sayville, L. I., N. Y.; John K. Janson, Yreka, Calif.; Frank Harris, Southboro, Mass.; Burton G. Smith, Washington, D. C.; Roberta F. Rowe, Chicago, Ill.; John M. French, Woodstock, Va.; Herman A. Pagenkopf, Washington, D. C.; Jesse C. Price, Beverly, Ohio; Wm. F. Behrends, Albert Lea, Minn.; Joseph C. Schifano, Pittsburgh, Pa.; Solomon Sauber, Jamestown, N. Y.; Lester O'Callaghan, Baltimore, Md.; J. R. Phillippe, Indianapolis, Ind.; Mr. and Mrs. D. B. Adams, Delphi, Ind.; Mr. and Mrs. Harry L. Schrader, Baltimore, Md.; George D. Coleman, Jr., Atlanta, Ga.; Mr. and Mrs. William M. Spahn, Louisville, Ky.; Rev. J. J. Caringhan, Baltimore, Md.; Davis Hill, Austin, Texas; Albert A. Simon, New York City; Charles A. Herb, Ridgewood, L. I., N. Y.; John J. Virgona, Guttenberg, N. J.; Rev. and Mrs. John Neville, Washington, D. C.

The American Institute of Pharmacy was favored by a visit from the following friends, during September: Allan L. Kanerow, Washington, D. C.; Mrs. G. W. Boyer, Washington, D. C.; Vincent M. Chaine, West Roxbury, Mass.; Mr. and Mrs. Ernst H. Dutzauer, Milwaukee, Wis.; H. G. Jepson, Washington, D. C.; Lieut. L. H. Bender, Washington, D. C.; John Shostak, E. Norwalk, Conn.; Mrs. H. M. Shostak, E. Norwalk, Conn.; Arthur Hervey, Coronado, Calif.; Mr. and Mrs. I. U. Middleton, Brooklyn, N. Y.; C. K. Hegarty, Little Rock, Ark.; Frank Nau, Portland, Ore.; Miss Will-Ann Walker, Santa Fe, N. Mex.; Mr. and Mrs. W. H. Hood, Washington, D. C.; G. Peshkin, Asbury Park, N. J.; R. V. Miersch, Louisville, Ky.; Walter M. Hartmann, Schenectady, N. Y.; Israel Schwartz, Long Beach, L. I.; Lieut. Bernard Korn, Carlisle Barracks, Pa.; Lieut. L. P. Zagelon, Carlisle Barracks, Pa.; T. Bruce Furnival, Syracuse, N. Y.; Harry P. Margulees, Coytesville, N. J.; Wm. C. Luehrs, Ontario, Ore.; Mark Gottlieb, Vineland, N. J.; N. A. Frankel, Louisville, Ky.; Geo. C. Hayman, Hubbard, O.; J. W. Kelley, Kansas City, Mo.; L. B. Carey, Washington, D. C.; Norman B. Levett, Chicago, Ill.; T. Breitner, Washington, D. C.; Harry Goutko, Kenisha, Wis.; Mr. and Mrs. Kalman I. Perlman, Chicago, Ill.; Mike Kuhn, Indianapolis, Ind.; Melanie Cassou, New Orleans, La.; Rose Wiltz, New Orleans, La.; Mr. and Mrs. Leo J. Gartland, Flint, Mich.

AROUND THE STATES

OHIO

Conscription of Pharmacists.—In order to protect the public health, the State Board of Pharmacy of Ohio has advised Gen. G. D. Light, Director of Selective Service, in Columbus, that there is a shortage of pharmacists at this time, that in many localities if one or more men employed in a drug store should be called, a serious effect on the operation of many stores would result. Therefore General Light has been requested to consider carefully the question of deferring pharmacists at the present time and to so advise Local Boards and Government appeal agents.

KANSAS

Merchandising Clinic.—Kansas pharmacists enjoyed another three-day merchandising clinic from October 22nd to 24th. Among the subjects discussed were: "Merchandising the Soda Fountain;" "Merchandising Baby Goods and First Aid Products;" "Foot Remedies;" "Your Share of the Prescription Business." The meetings were held in Hays, Wichita and Topeka, in order to give all druggists an opportunity to attend.

Hospital Pharmacy.—The Association of Hospital Pharmacists of Kansas City held their first meeting in September. Plans for the future were taken up; affiliation with the Sub-Section of the A. P. H. A. was discussed.

NEW HAMPSHIRE

Convention Topic.—The theme of the New Hampshire Pharmaceutical Association convention held at Dixville Notch September 8th to 10th was "Preparedness." A feature of the convention was a thirty-minute symposium on "Keeping Up to Date, a Problem of the Profession," presented by the faculty of the Massachusetts College of Pharmacy.

Digitalis Harvest.—New Hampshire farmers are harvesting digitalis. This season 96 growers in 10 counties had a total of 6 acres. Because of the purity of their crops, the New Hampshire experimenters received top price of 50 cents a pound for their limited crops.

NEBRASKA

Intensive Study Course.—An eight-lecture intensive study course in drug store merchandising and merchandise information for managers of pharmacies, pharmacists and their clerks is being conducted under the auspices of the Department of Vocational Education of the Omaha public schools with Deau William A. Jarrett of the Creighton College of

Pharmacy in charge. Among the subjects covered thus far are "surgical dressings" and "photography."

NEW YORK

District Meetings.—A series of district meetings is being held by the New York State Pharmaceutical Association, at which regulations of the State Department of Labor and the Board of Pharmacy and trade matters are scheduled for discussion. The following meetings have been scheduled:

Wednesday, October 30, at Albany.

Friday, November 8, at Syracuse.

Thursday, November 14, at Buffalo.

The speakers will include Wentworth Barnes, Nicholas Gesoalde, Alva T. Knight and George W. Mather.

WISCONSIN

State Meeting.—The Wisconsin Pharmaceutical Association met in Milwaukee October 15th. to 17th. This year one main session a day was held, from 11.00 A.M. until 3.30 P.M. One of the big features was a Drug Exposition. Three symposiums covered most of the work: one on organization work, one on professional pharmacy and one on merchandising. Many interesting and educational talks were presented, among them: "Improving Mixtures by the Use of Suspending Agents;" "The Treatment of X-ray Burns;" "A Prescription Survey of Official and Non-Official Preparations;" "Profits Realized on Various Types of Prescriptions;" and "The Wisconsin Circuit Teaching Program."

MASSACHUSETTS

Public Health Night.—Governor Leverett Saltonstall of Massachusetts and officers of eleven prominent pharmaceutical and medical organizations participated in the celebration of Public Health Night at the Massachusetts College of Pharmacy on October 16th. The theme of the occasion was "Pharmaceutical Education and the Public Health." Governor Saltonstall spoke at some length on the importance of adequate education and training for those who would enter the health professions. Each of the other speakers offered wholehearted support in carrying out plans which, in the interests of the preservation of the public health, have as their objective the requirement of a thorough pharmaceutical education and training for all who come before the State Board of Registration in Pharmacy seeking licenses to practice the profession.

SOUTH DAKOTA

Board of Pharmacy Appointments.—S. A. Amunsen, of Mobridge, S. Dak., has been renamed to a three-year term on the State Board of Pharmacy. J. H. Sidle, of Alexandria, was appointed for a year to fill the unexpired term of George Lloyd, of Spencer, resigned.

Additions to Library and Museum

Prof. Bernard E. Read, Head of the Division of Physiological Sciences, Henry Lester Institute of Medical Research, Shanghai, China, has favored the AMERICAN PHARMACEUTICAL ASSOCIATION with a number of reprints. These are accepted with thanks. They are: "The Dragon in Chinese Medicine;" "The Effect of pH on the Activity of Adrenaline and Ephedrine;" "Total and Phytic Acid Phosphorus in Foods;" "The Estimation of Free Vitamin B in Pure Preparations, Food and Urine;" "Observations on Vitamin B Metabolism;" "The Total and Available Iron in Vegetable Foods;" "The Physiological Action of Antimony Sodium Thioglycollate and Antimony Thiocollate and Antimony Thioglycollamide;" "The Zinc and Copper Content of Blood in Beriberi, in Conditions Associated with Protein Deficiency and in Diabetes Mellitus;" "Vitamin B Content of Chinese Plant Beriberi Remedies;" "The Effect of Hyperthyroidism on the Action of Adrenaline and Ephedrine."

Proceedings of the American Drug Manufacturers Association for the 1940 meeting has just been received by the AMERICAN PHARMACEUTICAL ASSOCIATION. The meeting was held at Greenbrier, White Sulphur Springs, West Virginia, in May. The volume follows the usual procedure of make-up, showing as frontispiece the photograph of the president, S. DeWitt Clough. Thanks are extended for the copy, which has been placed in the Reference Library.

"A Survey of the Medical Program of the Grammar Schools of Fulton County, Georgia and Better Education for Health" was recently presented to our Library by Mr. E. W. Aldredge, of the Southern College of Pharmacy in Atlanta. This contribution is a valuable addition to our Reference Library.

The Estate of Dr. Paul Pearson, of Washington, D. C., has donated to the Museum of the AMERICAN INSTITUTE OF PHARMACY the following: A Prescription Balance in a case; a Brass Mortar and Pestle; a Physician's Hand Balance; a Wooden Mortar and Pestle. These are acknowledged with thanks and have been placed in the Museum.

Through the kindness of Dr. Edward Kremers a copy of "Tablets I. The Evolution of the Tablet Machine. II. A Bibliography on Tablets," by P. A. Foote, has been placed in the Library of the AMERICAN INSTITUTE OF PHARMACY. This monograph was presented to the University of Wisconsin as a thesis submitted for the Master of Science degree. It was published in December 1928 in the *Bulletin of the University of Wisconsin*.

OBITUARY

William G. Crockett

Dr. William G. Crockett, of Richmond, Va., passed away on October 29th. Born at Tazewell, Va., January 9, 1888, he studied at Hampden-Sydney College, 1906-1908, and received his D.Sc. degree from there in 1939. In 1913 he received the degree of Pharm.D., at Columbia University; and his M.S. degree from New York University, in 1917.

Dr. Crockett had a wide experience, having served as chemist with the Department of Health, in New York City; as assistant in chemistry, New York University; as chemist with E. R. Squibb & Sons, and with du Pont & Co.; as Professor of Pharmacy, Baylor University, Dallas, Tex., and was connected with the Chemical Warfare Service in Washington, 1917-1918. Since 1920 he has been Professor of Pharmacy at Medical College of Virginia, Richmond.

He was a member of the Revision Committee, U. S. P., 1930-1940; a fellow in the American Association for the Advancement of Science, a member of the American Institute of Chemists, American Association of Colleges of Pharmacy (serving as president in 1937), member of the American Association of University Professors, American Chemical Society, AMERICAN PHARMACEUTICAL ASSOCIATION, Virginia Pharmaceutical Association, Virginia Academy of Science, Pi Kappa Alpha, Kappa Psi, Rho Chi and Sigma Zeta. He was also a member of the Presbyterian Church and a Mason.

Dr. Crockett had contributed to many pharmaceutical journals.

In 1919 he married Miss Ethel May Dulin and one daughter, Mary Leila, graced their home. Both survive the deceased.

Charles H. Gauger

Charles H. Gauger, aged seventy-two, died on Saturday, September 28th, while resting in the backyard of his home in Buffalo, N. Y. He was born and educated in Rochester and graduated from the University of Buffalo fifty years ago. He had served on its faculty, intermittently, since 1891. Last April the Alumni Association honored him with the Gregory Memorial Medal, which lauded him as an outstanding pharmacist "who personifies the ideal of service and integrity in the pharmacy profession." The University was closed in his memory, the afternoon of his funeral.

Professor Gauger had been an examiner on the New York State Board of Pharmacy and served one year as its president. He was a member of the New York State Pharmaceutical Association, and had

been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1924. He had been associated with the retail drug business since he was a boy of thirteen. Mrs. Sophia C. Gauger, his widow, survives; also two sons, Chester P., of Salamanca and Dr. William H., of Manville, N. J.

Harry S. Berinstein

Harry S. Berinstein, Springfield, Mass., recently passed away, aged 44.

Mr. Berinstein founded the Harris Pharmacy about seven years ago. He was a past-president of the Springfield Druggists' Association, a member of the Massachusetts Pharmaceutical Association, and had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1934.

He was born in Springfield, attended the local schools, and graduated from Massachusetts College of Pharmacy. During the World War he entered the air service of the U. S. Navy.

Surviving are Mrs. Bessie D. Berinstein, his widow; one daughter, Dorothy, and one son, Edward, both at home.

Frank S. Hereth

Frank S. Hereth, of San Francisco, Calif., died in August. He was a Life Member of the AMERICAN PHARMACEUTICAL ASSOCIATION. Mr. Hereth was born in Indianapolis, Ind., in 1858. After graduating from high school he went to New York and passed the State Pharmacy Board examination. He was then eighteen years old but in spite of his youth was engaged to stock a drug store, and ran it himself successfully for a number of years. He then went to Chicago and taught pharmacy and chemistry at the University of Illinois. Later he joined Mr. Searle in founding the Searle and Hereth Co., manufacturing chemists, in Omaha, Nebr. The business prospered and they moved it to Chicago. He invented the first tablet machine but never took out a patent on it, preferring to give it to the company. In 1908 he severed this connection and joined E. R. Squibb & Sons, in New York. He retired in 1932.

At the time of his passing Mrs. Hereth survived, but she passed away one month later. Three daughters are living: Mrs. Bryce Hess, Chicago, Ill.; Miss Mary Hereth and Mrs. W. T. Goldsborough, both of Berkeley, Calif.

Oscar L. Bichinger, president of the Mallinkrodt Chemical Works, died on September 17th. He had been affiliated with his firm since 1888.

EDITORIAL

Back to the Show Globe

On the front cover of this issue of *THE JOURNAL*, we depict a part of the collection of show globes which were presented to the museum of the AMERICAN PHARMACEUTICAL ASSOCIATION by Lawrence S. Williams who formerly conducted a pharmacy in the city of Baltimore and made a hobby of collecting show globes, which had been used in various pharmacies throughout the United States at various periods. This collection in the headquarters building of the AMERICAN PHARMACEUTICAL ASSOCIATION on Constitution Avenue, Washington, D. C., is reminiscent of the days when the show globe was an indispensable part of the front window equipment of the retail pharmacy. The colored liquid in these show globes, and, in fact, the shapes and complicated design of the bottles themselves added to the air of mystery which surrounded the apothecary shop of former years and attracted the interest of the layman. A recent reawakening of interest in the art of the apothecary and exposure of the practice of this art to public view by means of open display prescription departments has also led to restoration of the show globe with its colored liquids to a place of prominence in the retail pharmacy.

The modern show globes are "streamlined," as it were. Illumination of their colored contents is made easier by means of electricity. They lend tone to any display of apparatus and equipment designed to fix attention on the professional aspects of the pharmacy. They do not catch the dust as readily as the more intricately designed older show bottles with their lips and recesses and cut glass crevices. However, they represent in modern form the same thought and ideals that prompted the display of the older type.

But the very fact that apothecaries' show globes are museum pieces is cause for some reflection. Manufacturers of glassware no longer supply show globes of the design found among the bottles pictured on our front cover. Conceivably they could be made to order but the expense of securing an especially prepared and especially designed show globe, even if the producer of glassware could be found to make them, would be prohibitive for most pharmacies.

The important fact associated with the display pictured on our front cover is that the revival of the interest in the show globe is only another indication of the slow but sure progress that is being made in the revival of public as well as professional interest in the strictly pharmaceutical activity of the drug store. While it is true that many newly organized and newly built pharmacies have given space to departments which are unrelated, at least directly, to the practice of pharmacy, there has been a very definite trend in the direction of allotting very prominent and more adequate space to the drug and prescription departments of the pharmacy. Furthermore, the trend in the direction of segregating this division of the drug store's activities in such a manner as to avoid unnecessary contact with the other divisions of the "store" grows more pronounced with the passage of time.

The general public is gradually being educated to gravitate toward the more exclusive prescription pharmacy whether such a pharmacy is self-contained or whether it is a part of a larger establishment operated as a drug store which also deals in other materials. "Back to the show globe" may be a slogan but it indicates not only the revival of interest in the symbol of the art of the

apothecary, but also a very distinct demand for the highest type of professional service

in every establishment licensed by the state to carry on pharmaceutical work.

The National Formulary

The Federal Food, Drug and Cosmetic Act and state laws which are based upon this act recognize three publications as "official compendia." These books are the United States Pharmacopœia, the National Formulary and the Homœopathic Pharmacopœia of the United States. Neither the federal nor state acts express any preference as between the United States Pharmacopœia and the National Formulary. However, the federal act does state that "whenever a drug is recognized in both the Pharmacopœia and the Homœopathic Pharmacopœia of the United States, it shall be subject to the requirements of the United States Pharmacopœia unless it is labeled and offered for sale as a homœopathic drug, in which case it shall be subjected to the provisions of the Homœopathic Pharmacopœia of the United States, and not to those of the United States Pharmacopœia."

It is clear, therefore, that with the exception noted in the foregoing sentence the United States Pharmacopœia, the National Formulary and the Homœopathic Pharmacopœia of the United States are official standards on exactly the same legal level. Therefore, the public interest is served equally well by the inclusion of standards for a drug in any of the "official compendia." Furthermore, in the Federal Food, Drug and Cosmetic Act, it is distinctly authorized that whenever tests or methods of assay have not been prescribed in an official compendium, or such tests or methods of assay as are prescribed are, in the judgment of the enforcement authority, insufficient for the determination of the strength, quality or purity of a drug, the enforcement authority shall bring such fact to the attention of the appropriate body charged with the revision

of such compendium, and if that body fails within a reasonable time to prescribe tests or methods of assay which, in the judgment of the enforcement official, are sufficient, then the enforcement authority shall promulgate regulations prescribing appropriate tests or methods of assay in accordance with which the necessary determinations as to strength, quality or purity shall be made.

It will be noted, therefore, that not only are the official compendia mentioned in Food, Drug and Cosmetic Acts considered of equal importance, but the respective revision authorities are given equal status in the matter of supplying lacking or desired information. Nothing is said in the law with respect to the admissions and deletions of drugs to or from any of these books. Presumably this is a matter within the complete control of the revision authorities in each case. The transfer of a National Formulary drug to the United States Pharmacopœia does not make it any more or less official than it was when it was listed in the National Formulary in the eyes of the law. Likewise, the transfer of a United States Pharmacopœial drug to the National Formulary does not make it any more or less official than it was in the Pharmacopœia.

It seems clear, therefore, that the time has come for a complete understanding between the revision committees of these two books of standards with respect to admissions and deletions. The beginning of such an understanding is the recognition of the fact that in the eyes of the law the books have equal standing. The dropping of a drug from either standard takes that drug out of official classification. Should the deleted drug be admitted to one or the other standard volume it would regain its official

standing completely in the eyes of the law. One can conceive of the possibility of a drug deleted from one volume being taken up by the other, but it is hardly conceivable that in the light of the official status of both volumes there is any necessity for transferring a drug from one volume to the other merely to give it *official* recognition. Furthermore, if a simple drug is listed in one of the two volumes and a dosage form or dosage forms of the drug are listed in the other volume, the mere reference to the existence of the dosage form in the volume which lists the drug is sufficient information to all concerned regarding the standards for the dosage form and where they may be found.

The National Formulary has kept pace with the demands of the medical profession as reflected in prescriptions for dosage forms submitted to the 55,000 or more pharmacies in the United States for compounding. The

revision committee of the National Formulary has been carefully selected and the AMERICAN PHARMACEUTICAL ASSOCIATION, which is responsible for the production of this volume, has established its own laboratory in charge of a full-time director and chairman of the revision committee. It is, therefore, meeting the spirit of the new Food, Drug and Cosmetic Act in a most acceptable manner. Formulas, tests and assays are being devised and subjected to critical examination and research in the laboratory of the association at Washington. At the present time, the National Formulary is the only one of the three official compendia which is under continuous revision in charge of a full-time chairman, laboratory director and laboratory staff operating in a laboratory exclusively designed and maintained for the purpose of creating, revising and improving standards and formulas for official drugs.

The Outlook for State Legislation

The year 1941 will find about forty out of the forty-eight state legislatures in session at some time or other. Legislative programs are being prepared by all types of organizations and before very long the usual flood of bills will find their way into the legislative hoppers to reappear, if at all, in considerably modified and at times in vicious forms. Such, at least, is the past history of state legislation.

There has been considerable agitation in recent years for revision of the more or less archaic provisions of some of our state pharmacy acts. The passage of the Federal Food, Drug and Cosmetic Act has, of course, given considerable impetus to the enactment of supporting state legislation in this field.

Pharmacists have received advice from some sources to remain on the side lines with respect to food, drug and cosmetic legislation in order to await the outcome of the effect of federal legislation in this field. Less than ten

states have thus far enacted legislation which can be designated as duplicating the federal act. However, a determined effort will be made by food and drug officials in the various states which do not have such laws, to secure enactment of such supporting legislation. They will have the aid of consumer groups and national industries which have already adjusted themselves to the federal act and are anxious to see state legislation enacted which will require local competitors to meet the same standards and label requirements now demanded of those doing an inter-state business.

We believe that pharmacists should join those who are sponsoring state legislation which is uniform with the Federal Food, Drug and Cosmetic Act. Not only is this in line with the public good but it is also beneficial to the pharmacist who is anxious to uphold high professional and economic standards.

The National Drug Trade Conference and the Association of Food and Drug Officials of the United States have prepared model state bills which furnish the basis for proposed state legislation. There is no great difference between the provisions advocated by these two groups and it is advisable for pharmaceutical associations to join with state officials in sponsoring legislation which will properly aid the coördinated federal program for better control of the production and distribution of foods, drugs and cosmetics.

Some pharmacists have opposed the enactment of State Food, Drug and Cosmetic laws similar to the federal act, because of what they consider too stringent provisions with respect to the labeling of drugs. The fact is that the new federal act does provide that the therapeutically active ingredients of a drug be stated on the label and that adequate directions for use and necessary warnings be printed on such labels. This is not nearly the hardship that some would have us believe. Drugs distributed in interstate commerce are now being labeled in accordance with the provisions of this law. While some of the labels are quite lengthy it is not at all certain that state enforcement officials will consider it necessary to require as much and as detailed information on the labels of well-known drugs sold over the counter by pharmacists as are required by the federal authorities on proprietary preparations not dispensed on prescriptions.

State food and drug law enforcement officials have already indicated that they will enforce the drug provisions of State Food, Drug and Cosmetic Acts sensibly and with due regard for the honest intentions of retail pharmacists who have long been regarded as helpful advisers to the public in the selection of drugs purchased for self-medication or without a physician's prescription. The article entitled, "Adequate Warnings on Drug Labels" in this issue of THE JOURNAL indicates the lines along which state officials in this field are thinking.

As far as state pharmacy laws are concerned, the AMERICAN PHARMACEUTICAL ASSOCIATION has for some years been active, through its Committee on Modernization of Pharmacy Laws, in studying the defects of present laws and providing remedies for these defects. In this issue of THE JOURNAL we present an article on the "Basic Principles of Pharmaceutical Legislation" by Dr. Robert L. Swain, chairman of the A. PH. A. Committee on Modernization of Pharmacy Laws. State committees on legislation will do well to study this article carefully and to base amendments or revisions of pharmacy laws on the suggestions made in this article and on the model definitions and clauses provided by the committee. Copies of the model pharmacy act can be obtained from the office of the Association, 2215 Constitution Avenue, N. W., Washington, D. C.

B. V. Christensen Named President-Elect

The Board of Canvassers of the AMERICAN PHARMACEUTICAL ASSOCIATION, composed of R. C. Wilson, Chairman, University of Georgia, Athens, Georgia; L. C. Camp and T. C. Marshall of Atlanta, Georgia, have announced, the following result of the mail ballot for the officers of the ASSOCIATION:

President-Elect—B. V. Christensen.

First Vice-President-Elect—J. K. Attwood.

Second Vice-President-Elect—L. W. Rowe.

Members-Elect of the Council—R. L. Swain, New York; P. H. Costello, North Dakota; F. E. Bibbins, Indiana.

These officers will be installed at the next annual meeting of the ASSOCIATION which will be held in Detroit, Michigan, August 17-23, 1941.

Dr. Christensen is dean of the College of Pharmacy of Ohio State University. Mr. Attwood is a practicing pharmacist and member of the Florida Board of Pharmacy. Mr. Rowe is engaged in research and control work in the field of biological assaying with Parke, Davis & Co. Dr. Swain is Editor of *Drug Topics* and *Drug Trade News*. Mr. Costello is a practicing pharmacist and secretary of the North Dakota Board of Pharmacy. Mr. Bibbins is chief pharmacist with Eli Lilly & Co.

Problems and Plans

COURSES IN FIRST AID assume more important proportions as a part of the pharmacy curriculum to-day because of the national defense and preparedness program. For many years colleges of pharmacy hesitated to give detailed or extensive instruction in such matters because it was feared that the medical profession might consider that instruction of pharmacists in first aid technique would lead to encroachment upon medical practice. The laws covering medical practice in the various states are quite stringent with respect to diagnosis and prescribing. Pharmacists are taught not to overstep the mark and the enforcement of state medical practice acts has been of such a nature in some states as to cause pharmacists to lean over backward in their refusal to exercise any function which might be even remotely considered as a usurpation of the function of the doctor. With military service extended to all able-bodied citizens between twenty-one and thirty-five and with the possibility of participation in a war at hand, it seems but natural to expect colleges of pharmacy to teach future members of the profession at least as much about first aid and efficient participation in the control of disasters as is taught a policeman or fireman or a boy scout counselor. In the Medical Administration Corps of the United States Army and in the U. S. Naval Hospital Corps, pharmacists are expected to assume many more medical responsibilities than is the case in home communities. However, the possibility of service in the armed forces, as well as preparation for emergencies at home, demands that the well-educated pharmacist shall be adequately trained in first aid administration. Such training will not only be advantageous to the community but it will be very helpful in restraining prospective pharmacists from overstepping the line into what may be termed strictly medical practice.

THE VACANT CHAIR at the right of the presiding officer in the meeting room of the National Association of Boards of Pharmacy at Richmond last May was conspicuous because the Honorary President of the Association, Dr. Edward Kremers, scholar, teacher and inspirer of men who do not believe pharmacy to be a "vanishing profession," and who should have occupied the chair, was no longer a member of the Wisconsin State Board of Pharmacy. The appointment of Dr. Kremers to membership on the Wisconsin Board of Pharmacy some years ago was an unusual act on the part of the then chief executive of that state. It is not often that a governor selects for membership on a Board of Pharmacy the retired director of a School of Pharmacy. Yet in this case the appointment was as valuable to the profession as it was unusual in its political aspects. During his incumbency Professor Kremers initiated some unique methods of examining candidates for pharmacy certificates and exerted a salutary and lasting influence upon pharmacy law enforcement in Wisconsin. Since a subsequent governor's failure to reappoint Dr. Kremers to this post there has come from the press the "History of Pharmacy" by Kremers and Urdang. This is a monumental work which is destined to take its place among the best books on the history of pharmacy and becomes at once the classic among histories of American pharmacy. It must seem very unfortunate to those who have the future welfare of pharmacy at heart that ability, wisdom and experience count for so little with those who appoint our public servants in the field of professional licensure and law enforcement. It seems even more unfortunate that appointments to Boards of Pharmacy are so often subject to political footballing among pharmacists themselves.

PERIODIC HEALTH EXAMINATIONS provide the very best opportunity for the detection of the degenerative diseases in time to arrest their progress and often to

effect cures. It is a notorious fact that in all health activities throughout the nation, insufficient attention is paid to the prevention of disease. The intelligent layman can readily be convinced that it is to his interest and to the interest of his family to have a personal check-up at least once a year. It may be a new thought to some that a periodic examination of the human body can be productive of longer life to the same extent that an occasional check-up of an automobile may reveal weaknesses which might cause accidents and monetary loss. Physicians are in a rather difficult position to advertise the periodic health examination. Dentists have adopted the scheme of sending a card to their patients every six months, at their request, suggesting a routine examination of the mouth. In some states a similar procedure has been suggested to physicians and in the past year one state medical society prepared a birthday card and letter to be mailed from the doctor's office to his patients, calling attention to the necessity for an annual examination as a means of prolonging good health and life itself. Physicians do not readily follow suggestions of this kind and therefore an alert pharmacist has an unusual opportunity to render a service along this line not only to the public but also to the medical profession. Literature referring to the possibility of a periodic health examination can be kept on the wrapping counter and can be inserted with packages coming from the drug store to the home from time to time. A birthday list maintained for the pharmacy is useful in the mailing of congratulatory messages with which may be enclosed a carefully worded note suggesting a visit to the doctor for the annual health examination.

OUR NATION'S MEDICAL DEFENSE set-up is believed to be the most far-reaching that the United States or any other nation has ever had. More than thirty committees and sub-committees of the nation's leading medical authorities have been mobilized to advise the Army and Navy on medical matters.

A PHARMACEUTICAL JOURNAL bearing on its masthead the quotation "America's Leading and Oldest Drug Journal" passed from the scene with a brief twenty-three line announcement in its November 1940 issue. "Founded January 1857 by Dr. Henry Bridgman," the *Druggists Circular* continued as a national publication for nearly eighty-four years, the last fifty-six being under the management which has just disposed of it to the Topics Publishing Company, Inc., publishers of *Drug Topics* and *Drug Trade News*. "It is with a keen sensitiveness of regret and loss that the present ownership of *Druggists Circular* comes to the end of fifty-six years of intimate association with pharmacy and the retail drug trade," states the announcement of the publisher. To the pharmacists of the present generation the passing of this landmark of pharmaceutical journalism probably does not mean very much since the march of events in this field had left the *Circular* stranded somewhere between the newspaper type of pharmaceutical publication and the illustrated magazine variety of journal. The kind of facilities available to an old-line trade journal organization made it impossible for the *Druggists Circular* to compete with the publications now monopolizing this field and it had long ago lost the individuality of a brilliant past which made it a giant among pharmaceutical publications of earlier generations. John H. Snively, the Parsons brothers, Caswel A. Mayo, Francis B. Hays, H. V. Army and others who occupied the editorial chair of this publication from time to time left their mark upon the progress of pharmacy as a perusal of the editorials of bygone years will testify. The fact that this publication always shrouded the names of its editors in anonymity was not sufficient to withhold their identity and their influence upon active participants in pharmaceutical affairs. They were readily identified by the products of their powerful pens and it was they who made the *Circular* the outstanding publication it was in the heyday of its glory. But, "Time Marches On."

Basic Principles of Pharmaceutical Legislation

By ROBERT L. SWAIN, *Chairman*

A. Ph. A. Committee on the Modernization of Pharmacy Laws

Any group of pharmacists attempting to amend their State Pharmacy Act should bear in mind the basic principles set forth in this article which is a brief summary of a thorough study of the problem by a very competent A. PH. A. Committee.

IN determining upon a pharmaceutical legislative program, the one important matter to decide is the legal status of drugs and medicines. Are these products to be considered as mere articles of merchandise, or should their character as merchandise be merely incidental to their broader and more essential function in the treatment of disease and the conservation of health?

The Committee on the Modernization of Pharmacy Laws of the AMERICAN PHARMACEUTICAL ASSOCIATION has proceeded on the latter basis, as it would be impossible for pharmaceutical legislation to afford the public that kind and degree of protection which is needed in the production and distribution of drugs and medicines if they were considered simply in the light of their commercial attributes, and this article will be devoted largely to a further discussion of this subject.

Basis for Model Act

The so-called Model Pharmacy Act as drawn by the Committee proceeded upon the belief that pharmacy is an essential public health profession, and that the production and distribution of drugs and medicines is essentially a professional function and should be subjected to public regulation and control. Therefore, the Model Act as drawn limits the production and distribution of drugs and medicines to persons and concerns operating under permits issued by the Board of Pharmacy. This applies to manufacturers, wholesalers, retailers, dispensing practitioners in the fields of medicine, dentistry, veterinary medicine, etc., dispensaries, clinics, hospitals and empowers the Board of Pharmacy to designate those drugs and medicines which in its judgment may be safely distributed by others than registered pharmacists, but even in these instances limiting the privilege to those persons to whom a permit has been issued.

The Pharmacy Act as drawn by the Committee on the Modernization of Pharmacy Laws has been criticized on the ground that it is too comprehensive and far reaching to have hope of adoption by the state legislatures. The Committee admits that there is some basis for this criticism, but the Committee proceeded on the belief that it could serve pharmaceutical legislation best by making available a draft embodying provisions which were theoretically desirable, leaving to the various states the task of seeking to secure the enactment of the Act as drawn or else permitting them the opportunity of modifying it in the light of what they considered the practical necessities. However, the Committee feels that an understanding of the theory and philosophy of the model draft is essential to an understanding of pharmaceutical legislation, and that the bill should be carefully and earnestly studied before any legislative program is embarked upon.

Simply because of their bearing upon this discussion, we should like to call attention to the preceding reports by the Committee on the Modernization of Pharmacy Laws. These were published in the November 1937 and November 1938 issues of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION and represent several years of earnest study of the subject.

Basic Definitions Essential

One of the reports constitutes a comprehensive survey of existing pharmacy laws and should be carefully read by all who really seek an authoritative understanding of the field. In making its study of existing pharmacy laws, the Committee was early impressed with what it considers a serious defect, namely, the absence of basic definitions. While the pharmacy acts operate exclusively upon drugs and medicines, the terms "drugs" and "medicines" are very infrequently

medicines are compounded and dispensed. The rapid development of hospital pharmacies and the inclusion of a well-operated pharmacy as the basis for recognition of a hospital by the American Hospital Association have given pharmacy a higher status in hospital practice and make it imperative that the pharmacy in such institutions be in the hands of professionally and legally competent persons.

It would, of course, be possible to extend this discussion at great length, as a study of our pharmacy laws might well show that they need to be amended so as to provide basic definitions other than those which have been discussed here. However, my purpose has been to emphasize the imperative need of incorporating basic definitions in our pharmacy laws, and I hope that what has been said here has served that purpose.

Biology as a Foundation for Pharmacy

By RICHARD A. DENO

Rutgers University, College of Pharmacy

WHY do I have to study biology to be a good pharmacist?" This question came from a freshman in a college of pharmacy, and from one whose father, a successful druggist, had graduated from a two-year course and had received no formal instruction in biology other than the small amount that had been included in his pharmaceutical botany. The question was probably an echo, because many druggists are asking this and similar questions about subjects now included in the pharmacy course but which may seem rather remote from a modern drug store.

We can answer our freshman in a general way by saying that biology is a fundamental course—that it is part of the foundation upon which more advanced courses are built. We can say that biology bears the same relationship to such courses as physiology and bacteriology as does general chemistry to the advanced chemical courses. This may satisfy the freshman, but probably sounds vague to his father, the practical druggist. So let us illustrate by one or two examples.

In biology the student spends considerable time in studying osmotic phenomena—what happens to cells when they are put in liquids with a lower salt content, or a higher salt content or the same salt content as have the cells. He observes the behavior of molasses and water separated by a membrane of cells and he studies the theoretical explanation of what he has seen.

From this he should get some notion of the influence that solvent, salts and colloids have on the exchange of materials between living cells and the various fluids with which they may come in contact. Later on when he is studying such

preparations as Physiological Solution of Sodium Chloride, U. S. P., or Isotonic Solution of Dextrose and Sodium Chloride, N. F., the significance of "Physiological" and "Isotonic" should be understood readily. In his father's store if a physician who is concerned over the comfort of his patients requests that an eye prescription be made isotonic to tears with sodium chloride so that it will not smart when applied, the student should know not only how to prepare such a solution but he can understand as well what processes in the eye make it necessary to combine the ingredients in the particular proportion.

We might also tell our freshman that biology has a practical value in the drug store apart from the prescription department, but again the pharmacist who feels that he knows no biology might not be convinced easily that such is the case. What practical use can possibly come of a knowledge of the chemical constituents of protoplasm—the stuff of which all cells are made? Within recent years the practice of growing plants without soil has received wide publicity, and for a layman who indulges in such activities as a hobby the drug store is the source of his advice and supplies. With a basic knowledge of the chemical constituents of protoplasm the druggist can tell him why certain salts are included and others are not. In some localities the sale of insecticides and vermicides is an important source of revenue, and the helpful druggist has data on the nature of the pests, their feeding and breeding habits and the most effective eradicators. This knowledge is biology—whether part of it was gained from a formal course or whether it was all dug out of governmental or other publications. Obviously,

a single course in biology will not equip a druggist to answer every biological query that may come his way, but some knowledge of the subject may prove useful at the most unexpected times and will give him further sources of available information.

And finally we can tell our freshman that his course in biology has cultural values and here, most of all, our explanation is likely to be questioned. Such values are hard to define, probably because we find it difficult to define culture. But the values exist if we accept Mathew Arnold's definition of culture—the acquainting ourselves with the best that has been known and said in the world. In the field of biology if we know what the great scientific authorities regard as the truth we are able to form more intelligent impressions on affairs of current interest to the pharmacist as well as to everyone else.

If we are familiar with the biological concept of race—a group of people who have a common heredity rather than a group with the same political or religious beliefs—we see through some of the ridiculous statements on races, superior and inferior, that are being made to-day by those with no accurate knowledge of the subject. If we have even a passing acquaintance with biological science we are able to read understandingly much of the material of this nature in our daily press and in the pharmaceutical publications. And we can understand more fully some of the influences in each of our lives that spring from the fact that each of us is a living being in continuous contact with other living things both plant and animal.

To be honest we will have to tell our freshman and his father, the practical druggist, that a formal course in biology is not essential to make a man a good pharmacist. Some knowledge of biology certainly is necessary and is becoming increasingly more so. For many this knowledge has been gained here and there throughout the years. With a good foundation course the practical education of a pharmacist along biological lines should be easier and perhaps more accurate. The successful druggist knows that he never stops learning, and all any course in college can do is to point the way.

The Recipe Book published by the AMERICAN PHARMACEUTICAL ASSOCIATION contains more than 2000 formulas covering pharmaceutical preparations, hospital formulas, dental formulas, veterinary preparations, photographic formulas, cosmetic formulas and miscellaneous preparations.

Unsolved U. S. P. Problems

The U. S. P. Revision Committee has before it a number of unsolved problems requiring more or less extensive research. To obtain assistance in the solution of these problems the chairmen of the various sub-committees have stated the problems concretely, so that those with laboratory facilities and the time and will to contribute may make additional inquiry. The statement of the problems as furnished by Chairman E. F. Cook of the U. S. P. Revision Committee follows:

1. A method for biological assay of Ergot that measures the content of both Ergotoxine and Ergonovine types of alkaloids.
2. An efficient and inexpensive method for biological assay of Aconite and its preparations
3. Statistical studies of the value of Anti-pneumococcal Serums in general practice.
4. Suitable standard of assay for Rheum based upon its Anthraquinone content.
5. The comparative anatomy of the rhizomes and roots of Chinese Rhubarbs yielded by *Rheum officinale*, *R. palmatum*, *R. palmatum var tanguticum* and hybrids between these and other *Rheum* species including *R. Rhaponticum*.
6. Further studies of the assays of Cantharidis, Ipecac and Capsicum.
7. Chemical assay of Aconite and Aloe.
8. The separation of Strychnine and Brucine.
9. The therapeutic value of reduced iron.
10. The absorption of pure powdered electrolytic iron from the alimentary tract.
11. Rapid, accurate method for the determination of the pH of distilled water.
12. Further study of the limit of unsaturates test in Cyclopropane.
13. Heavy metals' test for Diluted Hypophosphorous Acid.
14. The sensitivity of the flame test for sodium in chemicals used as reagents.

NOTE: In the case of some reagents, e. g. potassium oxalate, it is required to "impart no distinct yellow color to a colorless flame," while in the case of potassium nitrite a yellow flame is given by the presence of about 0.05 per cent sodium when testing a 5 per cent solution, and with potassium nitrate a yellow flame indicates about 0.02 per cent sodium when a 10 per cent solution is tested. Careful tests on sodium free salts to which known quantities of sodium salts are added would make possible a revision of the statements and might result in corrections.

15. Oil of Cassia, tests and constants.
16. Oil of Nutmeg, detection of Pinene or redistilled Oil of Turpentine.
17. Oil of Peppermint, tests and constants, (distinction between unrectified and rectified).
18. Stability of Fluidextract of Ergot.
19. Tincture of Digitalis.
A study of the U. S. P. Tincture and a comparison of the tincture made from defatted drug to determine the difference, if any, in activity.
20. A cytogenetical study of *Rheum officinale*, *Rheum palmatum* and other Asiatic Rhubarbs.
21. A cytogenetical study of *Digitalis purpurea*.

Adequate Warnings on Drug Labels

By ROBERT P. FISCHER

Chairman, Committee on State Food and Drug Legislation

The suggested label warning notices issued by the Food and Drug Administration under the Food, Drug and Cosmetic Act have been subjected to critical review and revised suggestions have been prepared for the guidance of pharmacists in complying with State Food, Drug and Cosmetic Acts paralleling the Federal Act.

A number of conferences have been held during the past year by groups of State Food and Drug officials to consider the application of the drug regulations promulgated under the Federal Food, Drug and Cosmetic Act to state acts which conform to the federal act. In these conferences it became clear that the viewpoint of state officials is influenced not only by the welfare of the consumer but also by the habits and thinking of the consumer and the degree to which the character and type of industries and professions regulated must affect state enforcement procedures.

The Federal Food, Drug and Cosmetic Act concerns itself with the movement in interstate commerce of foods, drugs, devices and cosmetics. State acts, on the other hand, are concerned with the distribution of foods, drugs, devices and cosmetics to the ultimate consumer. This legislation, whether federal or state, has been designated as "consumer legislation" which means that it was primarily enacted in the interest of consumers. It is, therefore, plain that consumer reaction as well as the reaction of the retail distributor come into play to a much greater extent in the enforcement of State Food, Drug and Cosmetic Acts than is the case under the federal act. The federal enforcement agency deals with large-scale producers whose products move chiefly in interstate commerce. These producers usually have at their disposal technical personnel, laboratory facilities, research departments, libraries and legal advisers, all of which are available to only a limited extent, if at all, to small scale retail dealers or producers engaged in intrastate commerce.

Therefore, while the federal government can readily take the position that producers of foods, drugs, devices and cosmetics, who originate or develop articles of commerce regulated by this law should be able to work out proper labels and literature conforming to the provisions of the law, state officials who deal with persons or firms

distributing these same products, or products of their own manufacture for sale at retail to the ultimate consumer, are expected to give advice, counsel and suggestions on labeling if substantial compliance with the law is to be expected. Furthermore, it has been a dictum in state law enforcement procedure that it is less expensive to stop possible violations at the source by educational methods than to prosecute violations resulting from failure to properly understand the provisions of the law or the interpretations placed upon the law by the enforcement agency.

Coördinated State Enforcement

The state Food, Drug and Cosmetic Acts, which have followed the general provisions of the new federal act, must be interpreted in harmony with the interpretation placed upon the federal act, if satisfactory and coördinated enforcement in the interest of the consumer are to be achieved. Since the Food and Drug Administration has the personnel which is competent from a scientific, technical and legal standpoint to properly interpret this legislation, it is but natural for state enforcement agencies to follow the leadership of the federal Food and Drug Administration and to look in that direction for guidance in the interpretation and enforcement of the law.

Too much praise cannot be extended to Commissioner Campbell and his associates in the Food and Drug Administration for the painstaking manner in which they have sought to establish a satisfactory, scientific, social and economic background for the regulations which have been developed for the enforcement of the federal Food, Drug and Cosmetic Act. The methods of arriving at what constitutes a fair and proper basis for the regulations which have been promulgated, deserve the highest commendation. At the same time it must be borne in mind that the federal regulations have been framed with interstate commerce chiefly in mind

and with the realization that the federal government deals with large industries, equipped with scientific and legal talent, as indicated in the opening paragraph of this report.

It has been the hope and desire of state enforcement officials to do an equally capable and satisfactory job of devising state regulations which will parallel the federal rules, and thus provide the coordinated enforcement which is so imperative if we are to have adequate consumer protection all the way down the line.

Under Section 502 (f) of the federal law, a drug is deemed to be misbranded unless its labeling bears adequate directions for use and adequate warnings against use in those pathological conditions or by children where its use may be dangerous to health, or against unsafe dosage or methods or duration of administration or application, in such manner and form, as is necessary for the protection of users, provided that where adequate directions for use are not necessary for the protection of the public health, regulations shall be promulgated exempting drugs or devices from such requirement. In the regulation under this section of the federal act, adequate directions for use are very carefully and clearly defined by stating under what conditions directions for use may be inadequate. However, a manufacturer or distributor in interstate commerce can escape the "adequate directions for use" requirement if he places upon the label of the drug or device, the statement "Caution: To be used only by or on the prescription of a physician, dentist or veterinarian."

Thus an interstate producer or distributor of a simple drug like Bicarbonate of Soda or of a potent drug like Tincture of Digitalis need not supply adequate directions for use if he places upon the label the caution that the product is to be used only by or on the prescription of a physician, dentist or a veterinarian.

Adequate Directions for Use

Under state laws, articles like Bicarbonate of Soda, Castor Oil and even Tincture of Digitalis may be sold directly to ultimate consumers without a physician's prescription. It, therefore, becomes the duty of the retail pharmacist or other retail dealer under state laws to label these drugs with adequate directions for use at the time they are sold to the ultimate consumer. The manufacturer's directions that Bicarbonate of Soda, or Castor Oil and even Tincture of

Digitalis, may be supplied only on a physician's prescription do not have the force of law and certainly in the case of Bicarbonate of Soda or Castor Oil, if they did have the force of law, the suggestion would be considered more or less ridiculous by the consumer, the medical profession and the retail druggist. The use of the cautionary statement referred to has become a device employed by manufacturers in interstate commerce to escape responsibility for the labeling of their products with adequate directions for use. Obviously, such an escape from a clear responsibility was not intended by the law and must be remedied in state regulations.

Warning Statements

As retail pharmacists and manufacturers and wholesalers engaged largely in intrastate commerce have read the warning statements suggested for labels of certain potent drugs, in the memorandum issued by the Food and Drug Administration, they have come to the conclusion, in many instances, that the adoption of a state law similar to the federal Food, Drug and Cosmetic Act, carrying with it the authority of the enforcement agency to require the printing of such warnings on the labels of commonly used drugs, would force them out of business, or, at least, make the going so hard as to justify their opposition to the law. This situation accounts in a very large measure for the under-cover as well as open opposition to the enactment of state laws modeled upon the new federal law. Some state enforcement officials have also expressed themselves in favor of awaiting the experience of several years with the federal act and the action of the courts on some phases of the law before recommending passage of a state law to supplement the federal act. Their reticence about advocating immediate passage of a state law is also traceable to some extent to the belief that the suggested warnings on drug labels are too exacting.

A committee of the Association of Food and Drug officials of the United States has given this matter careful study from every discernible point of view and has made certain recommendations with respect to warning statements. These recommendations are based on the following principles:

Basic Principles

1. Section 502 (f), on which any required warnings on labeling are based, provides that

warnings must be adequate *against use in those pathological conditions or by children where its use may be dangerous to health, or against unsafe dosage or methods or duration of administration or application*, in such manner and form, as are necessary for the protection of users.

2. Purchase of some drugs without a prescription may follow diagnosis and advice of a physician and necessary warnings on the labels of drugs should therefore distinguish between dangers arising from self-diagnosis and dangers arising from self-medication which is not based on self-diagnosis.

3. The use of disease names on labeling whether designed to recommend a drug or warn against its use may lead to self-diagnosis and should be avoided as much as possible.

4. Psychological effects, such as loss of confidence in drugs prescribed by the medical profession, fear of dire consequences from the use of drugs which have distinct value when not abused and fear of the occasional use of effective drugs recommended by physicians, inspired by the use of such terms as "habit forming" and "dangerous" should be avoided as much as possible.

In the field of traffic regulation we have become accustomed to the use of a red light to signal danger or "Stop." A green light indicates at all is clear or "Go." But in between we have the yellow light, which signals caution or watchfulness. It seems to us that drugs which cannot be given the green light may require either the stop signal or the caution signal. The stop signal is most easily applied by requiring dispensing on prescriptions only. The caution signal rather than the stop signal should be used when the danger from the use of a drug is not sufficient to warrant limiting its dispensing to physicians' prescriptions. The stop signal should not be used as a substitute for the caution signal on the basis of expediency. Any drug which is dangerous enough to health to require a warning which practically states "don't use this" should be dispensed only on a prescription. If the drug does not come into that category, the warning notice should be limited to a plain statement as to conditions under which it should not be used without medical advice. This seems to be the intent of the law and adherence to this policy in devising cautionary or warning statements will go a long way toward convincing consumers and legitimate vendors

of drugs that the purpose of supplementary state legislation is the protection of users and not the elimination of producers and distributors of legitimate drug products.

The word "warning" on a label should be used only in connection with narcotics, hypnotics and other definitely habit-forming and dangerous drugs. In all other cases where the intent is merely to caution, the word "caution" should be used. The warning notices issued under the Federal Food, Drug and Cosmetic Act were printed in full in the January 1940 issue of THIS JOURNAL. The revised warning notices suggested for compliance with state laws follow:

1. Cathartic or laxative drugs (including so-called roughage materials intended for use in constipation) which act as irritants to the gastro-intestinal tract or stimulate intestinal peristalsis:

"Caution: Not to be used in case of abdominal pain when accompanied by nausea, vomiting or fever. Consult your physician if you require the frequent or continued use of a laxative."

2. Preparations containing heavy mineral oil for intestinal lubrication by oral administration: (Light mineral oil is not recognized as an intestinal lubricant):

"Caution: Do not take directly before or after meals."

3. Preparations containing sodium perborate as an active ingredient and intended for local use in the mouth and throat:

"Caution: If its use causes irritation or soreness in the mouth, discontinue use."

4. Nose drops, inhalants and sprays:

- A. Those that contain oil as a vehicle or base:

"Caution: Not to be used for infants and young children."

- B. Those that contain ephedrine, epinephrine, amphetamine (benzedrine), propadrine, neosynephrin and other vasoconstricting drugs of similar activity:

"Caution: If frequent or continued use causes nervousness, restlessness or sleeplessness, discontinue use. Individuals suffering from high blood pressure, heart disease, diabetes or thyroid trouble should not use this preparation without medical advice."

5. Atropine and pharmacologically related drugs:

"Caution: Frequent or continued use of this preparation without medical advice should be avoided."

6. Iodine or iodides (Internal use):

"Caution: Do not use in case of lung diseases or chronic cough, goiter or

thyroid disease, except upon the advice of a physician.

"If a skin rash appears, discontinue use."

7. Nux Vomica and Strychnine:

"**Caution:** Frequent or continued use of this preparation without medical advice should be avoided."

8. Acetanilid:

"**Caution:** Not to be given to children. Do not take more than the dose recommended. If lips become blue or other unusual symptoms are noticed, discontinue use at once. Frequent or continuous use may be dangerous."

9. Acetophenetidin:

"**Caution:** Not to be given to children. Do not take more than the dose recommended. If lips become blue or other unusual symptoms are noticed, discontinue use at once. Frequent or continuous use may be dangerous."

10. Antipyrine:

"**Caution:** Not to be given to children. Do not take more than the dose recommended. If lips become blue or other unusual symptoms are noticed, discontinue use at once. Frequent or continuous use may be dangerous."

11. Bromides:

"**Caution:** Not to be given to children. Do not take more than the dose recommended. If rash or daytime drowsiness or any unusual symptoms occur discontinue use at once. Not to be taken by those suffering from kidney disease. Frequent or continuous use may be dangerous."

12. Mouth washes and gargles containing chlorates:

"**Caution:** Avoid swallowing"

13. Preparations containing arsenic except those employed as chemotherapeutic agents for specific diseases such as syphilis, amebic dysentery, etc.:

"**Caution:** Continued or prolonged use without medical advice may result in serious injury."

14. Preparations containing silver salts:

"**Caution:** Prolonged or frequent use of this preparation may result in permanent discoloration of the skin and mucous membranes"

15. Preparations sold under representations relating to coughs due to colds:

"Coughs may be symptoms of more serious ailments. If no improvement is noted within a few days, consult your physician."

16. Preparations sold for treatment of symptoms of common colds:

"Common colds may lead to more serious ailments, especially if accom-

panied by fever. If no immediate improvement is noted, consult your physician."

17. Preparations containing mercury intended for administration by mouth or by douches:

"**Warning:** The prolonged or frequent use of this preparation or the use in amounts in excess of the prescribed directions may cause mercury poisoning"

18. Rubificients, or irritants such as ammonia, arnica, cantharides, capsicum, chloroform, ether, methyl salicylate, pepper, mustard or turpentine oil intended for surface application:

"**Caution:** Avoid getting into the eyes or on mucous membranes. (Any other cautionary statements should be included in directions for use.)"

19. Chrysarobin or Goa Powder:

"**Caution:** Keep away from the eyes. Do not use over large skin areas."

All other drugs, for which the Food and Drug Administration has issued suggested warnings which are not listed here, should be dispensed only on prescriptions.

Poisons and the Public Health

THE *Northwestern Druggist* calls attention to the following headlines appearing in Iowa newspapers during the last two weeks of September:

Fayette—Iowa mother ends life after attempting to poison two small daughters with Lysol.

New Hartford—Two and one-half year old girl critically burned with carbolic acid.

Iowa City—Aged woman commits suicide, using a sleeping powder.

Sidney—Child in convulsions after eating tablets containing strychnine.

Sioux City—Young woman swallows disinfectant in suicide attempt.

Grand River—Three year old boy found unconscious after eating heart tablets.

Garner—Dog poisoner kills three more pets.

The editor comments as follows: "We remember a hearing at the State House, four years ago, on a poison bill brought forward by our ASSOCIATION. At that time Senator Corwin, of Fruitland, speaking in opposition, stated, 'When I think of poisons I think of a seed store.' I did not agree with the senator then or now. There cannot be too many precautions taken in the

sale of poisonous drugs and medicines to the public. No group is more conscious of this than the pharmacists—but to convince a legislature to strengthen our poison law is another matter.

"Eventually, sometime, probably on the heels of a catastrophe some legislature will agree with us, and will protect the people and the public health. In the meantime pharmacy can best serve the public by pointing out the laxity in the Iowa poison laws, whenever we have an opportunity. Manufacturers who desire no restrictions on the sale of their poisonous antiseptics, insecticides, rodent destroyers and 'household' chemicals, immediately charge the druggists with a desire to monopolize the poison market.

"They will not admit we have any desire to protect the public when we wish to restrict sales, to keep careful record of sales, to affix proper poison

labels, to warn the buyer of the nature of his purchase. They loudly claim all the druggist is interested in is a profit. We know we have refused sales time and again where we questioned the buyers' intentions. Most of our stores do not sell Hinkle Pills (with strychnine) because we know babies for years past have swallowed them and died. Rarely is a dangerous drug sold by a pharmacist without the buyer being told to 'be careful with it.'

"The manufacturer's position has consistently been, 'Let the buyer beware. We put on a poison label, which excuses us. Let's get everybody to selling our wares; we must have distribution.' *Could it possibly be that they are interested in a profit?* Is wide distribution and profit more important than public health?"

Jurisprudence Courses Needed

By JOSEPH A. ORTOLAN¹

WITH the advent of new and revised pharmacy laws and regulations the pharmacist and the student of pharmacy are rapidly becoming bewildered. What with the new Federal Food, Drug and Cosmetic Act, the Wheeler-Lea Act, the Caustic Poison Act and myriads of others, it is no wonder that the pharmacists and students alike are getting a bad case of legislative vertigo.

In alleviating this condition, we cannot recommend much to the established pharmacist except that he remain abreast of the times by subscribing to several trade journals, talk shop with his friends in the profession and belong to two or three pharmaceutical associations in his vicinity.

We can, however, suggest a revision of the jurisprudence courses in some colleges of pharmacy. In view of the fact that more than ever before, a graduate must be acquainted with juridical advancement and revision, the colleges of pharmacy should formulate a flexible curriculum capable of meeting the ever-changing conditions so characteristic of this subject. A few, short and specialized courses (perhaps an hour a week) in federal, state and municipal pharmaceutical law would be greatly appreciated by the future alumni.

In addition to this, it is our suggestion that one hour a week be added under Pharmacal Jurisprudence in the college curriculum for lecture, conference and informal discussion of problems dealing with pertinent and timely pharmaceutical legislation.

We are also of the opinion that the State Boards of Pharmacy should include questions on new laws and thus accomplish a twofold purpose. The examination would be brought up to date and it would create a lively interest in contemporary regulations and laws affecting the pharmacist and his livelihood.

Many students may also be aided by erecting a bulletin board in the college library listing new pharmacy laws and regulations and acts that are pending. Perhaps adjacent to this board a magazine library could be established, thus enabling the student to use the trade journals as quick and easy references and secure pro and con opinions from reliable authorities. These arguments or discussions analyzed by the students' professors, should provide an excellent mental compendium for the pharmacist-to-be.

Only in the thorough, rapid and accurate dissemination of contemporary pharmaceutical legislation can the graduate of a college of pharmacy be expected to stand on his own two feet, self-reliant and self-confident, in this dynamic world.

¹ Instructor in Economics and Pharmacal Jurisprudence, Brooklyn College of Pharmacy of Long Island University, Brooklyn, New York.

Pharmacy Program

American Association for the Advancement of Science Philadelphia, Pa., Saturday,
December 28, 1940

MORNING SESSION, 10 A.M.,

JUNIOR ROOM, BELLEVUE STRATFORD
HOTEL.

1. Heterocyclic Derivatives Related to Sulfanilamide. GLENN L. JENKINS and HAROLD URIST, University of Minnesota.
2. A Phytochemical Study of the Fruits of *Chenopodium Album* L. K. L. KAUFMAN, Medical College of Virginia.
3. Synthesis of α -Ketohydroximic Acid Chlorides. WALTER HARTUNG, University of Maryland.
4. New Magnesia Developments for Pharmaceutical Use. W. N. DOUSHKES, J. T. Baker Chemical Company, Phillipsburg, N. J.
5. Experimental Studies in Macromolecular Pathology. W. C. HUEPER, Warner Institute for Therapeutic Research, New York City.
6. Applications of an Improved Method for Measuring Temperature. J. C. MUNCH, G. C. HENNY and H. J. PRATT, Temple University, Philadelphia, Pa.
7. Acetanilid Studies. II. Chronic Toxicity. J. C. MUNCH, L. M. PHILLIPS and S. P. GARRETT, Temple University, Philadelphia, Pa.
8. Hydroquinone Achromotrichia and the Mouse Antialopecia Factor. G. C. MARTIN, Warner Institute for Therapeutic Research, New York City.

AFTERNOON SESSION, 2 P.M.,

JUNIOR ROOM, BELLEVUE STRATFORD
HOTEL.

9. The Development of Drug Standards for Official Products. JUSTIN L. POWERS, A. Ph. A. Laboratory, Washington, D. C.
10. U. S. P. Bioassay Reference Standards for Digitalis. C. T. ICHNIOWSKI, Warner Institute for Therapeutic Research, New York City.
11. Some Observations on the Biological Estimation of Ergometrine Acid Maleate. EDWIN J. DEBEER and PAUL A. TULLER, Burroughs Wellcome and Company, Tuckahoe, N. Y.
12. The Evaluation of a Group of Germicides by an Egg Injection Technique. B. WITLIN, Philadelphia College of Pharmacy and Science.

13. Bioassay of Anthelmintics. J. C. MUNCH, J. D. McINTYRE and Z. J. DROZD, Temple University, Philadelphia, Pa.
14. Studies on Viburnum. XI. Bioassay Methods. J. C. Munch and H. J. Pratt, Temple University, Philadelphia, Pa.
15. A Comparative Study to Establish the Normal Variations in Blood Counts Preliminary to Pharmacological Experimentation in Human Subjects. LEONARD J. PICCOLI, Fordham University, New York City.
16. The Effectiveness of Certain Drying Agents on the Moisture Content of Digitalis. DONALD P. LEGALLEY, Philadelphia College of Pharmacy and Science.

Glenn L. Jenkins, *Chairman*

Additions to Library and Museum

Dean J. Lester Hayman, Morgantown, W. Va., has donated a confidential price list of C. N. Tuttle, Agent, Auburn, N. Y., dated April 1, 1860, to our historical collection.

The Queen of Angels Hospital, 2307 Bellevue Ave., Los Angeles, Calif., sent to the library three old issues of the *American Druggist* and a U. S. Pharmacopoeia, fourth decennial revision, 1860, which have been received with thanks and placed in our library.

Acknowledgment is made of a copy of "Smoke Screen" by former Congressman S. B. Pettingill, author of "Jefferson, the Forgotten Man." The book has been placed in the Library of the AMERICAN INSTITUTE OF PHARMACY; copy may be obtained for \$1.00, from America's Future, Inc., 205 E. 42nd St., New York City.

Mr. Roy B. Cook, of Charleston, W. Va., has presented the ASSOCIATION with an article entitled, "Imports of the Confederate Government from Europe and Mexico," which is of great interest, particularly since a portion of the article deals with medicines and drugs.

Alpha Zeta Omega, pharmaceutical fraternity, has arranged to pay premiums on insurance policies of members called for a year's training in the defense program, under the Selective Service Act.

Isotonic Intranasal Medications*

By SISTER GLADYS ROBINSON and KARL J. GOLDNER†

Taking cognizance of the danger of possible pneumonias resulting from improper use of oily solutions of ephedrine, the authors suggest formulas for isotonic aqueous preparations.

THE use of nose drops and nose sprays has been widespread and popular in the past few decades. Formerly oily solutions were used almost exclusively, but at present there is an increasing interest in isotonic aqueous solutions as vehicles for these preparations. Therefore, a survey of the available literature has been made in order to determine the reasons for this change from oily to aqueous vehicles. Likewise, suggested formulas for isotonic aqueous intranasal medications have been included.

From the late nineteenth century until the past few years, an oily medium for nasal preparations was widely used. Various kinds of oils, such as olive, castor, cottonseed and light mineral oil were tried. However, light mineral oil has been preferred to vegetable oils because of its stability and chemical inactivity. Therefore, this discussion of oily vehicles primarily concerns light liquid petrolatum.

Experiments with living nasal tissue bathed in liquid petrolatum have not definitely shown that the oil is harmful to the nasal cilia, but rather that it inhibits their action by blanketing them. Proetz (1) found that, although liquid petrolatum does not seem to affect the ciliary beat, it causes a definite slowing of the mucus streaming. He advised that oily mixtures "are to be avoided where ciliary streaming still functions, because they interfere not with the ciliary beat but with the effectiveness, by lying on the mucous blanket and being propelled with great difficulty by it" (2).

It was his opinion that the oil was not in contact with the cilia at all but separated from it by mucus. Thus a watery envelope remains about the mucosa, and the oil does not wet the membrane.

* Abstract of a thesis presented to the Department of Pharmacy of the University of Wisconsin by Sister Gladys Robinson in partial fulfillment of the requirements for the degree of Bachelor of Science in Pharmacy.

† Instructor in Pharmacy, University of Wisconsin, School of Pharmacy. Presented before the Section on Practical Pharmacy, A. Ph. A., at the Richmond meeting, 1940.

Another result of this physical incompatibility between the oily solution and the wet mucosa is an insulation of the active ingredients contained in the oil from the tissues intended to be affected. This insulation of medicinal ingredients is highly undesirable from a therapeutic standpoint.

Of even greater importance is the effect of oily nose drops and sprays upon the lungs. In recent years numerous cases of lipoid pneumonia have been observed following the use of oily nose drops and sprays.

May Cause Lipoid Pneumonia

Lipoid pneumonia, or oil aspiration pneumonia, was first recognized in 1925 by Laughlen (3). He described the changes that took place in the lungs when oil got into them as a result of being instilled nasally or taken orally. He reported five cases, four in children and one in an adult.

Ikeda (4), in 1937, found 106 cases recorded in the literature in the ten years following Laughlen's report. Approximately one-third of these cases was due to intranasal use of medicated oils.

It has been suggested (5) that oil aspiration pneumonia be suspected in cases of pneumonia among infants and aged persons whose case history reveals the use of oily nose drops or sprays. Authorities on children's diseases feel that it is unwise to prescribe drops of oily medicaments to be instilled in the nose of any small or weak child (6). The Food and Drug Administration has in a communication to the chiefs of its districts and stations a suggested caution label for:

"Nose drops, inhalants and sprays.

"(a) Those that contain oil as a vehicle or base: 'Caution: The use of excessive amounts of this preparation may be dangerous. Do not use at all in infants and younger children except on competent advice'" (7).

As a result of the increased interest in the possible harmful effect of oily intranasal medications, greater attention is being paid to the use of aqueous vehicles for nose drops and sprays.

Experimental evidence has shown that tap and

distilled water, when applied to the mucosa of the upper respiratory tract, cause slowing of the ciliary beat. Furthermore, the fact that simple solutions of drugs are irritating and drying to the nasal mucosa has led to the use of preparations isotonic with the blood. Proetz (8), while studying the effects of various salt solutions on the ciliary beat, found that the cilia of both man and animal remain active for long periods of time in 0.9 per cent solution of sodium chloride. An increase in the concentration of the solution resulted in a decrease of the beat.

Slightly hypertonic solutions tend to abstract fluid from edematous mucosa, and stronger solutions destroy young cells that are attempting repair. Hypotonic solutions abstract salts from the tissue and impair mucosal resistance. Therefore, although a physiological solution is made slightly hypertonic by the addition of the medicinal ingredient, the amount of irritation and damage caused is not so great as when a hypotonic vehicle is used.

Isotonic Solutions Preferred

If oily intranasal preparations can enter the lungs, it is natural to assume that watery solutions may also reach the lungs. The possibility exists that once having entered normal pulmonary tissue they would cause pulmonary edema and necrosis, thus making ready for the development of pneumonia when and if pathogenic bacteria invade such areas. Walsh and Cannon (9) found that "isotonic saline solutions . . . caused no significant degree of pulmonary damage after intranasal instillation in normal rabbits."

The evidence of the compatibility of isotonic aqueous nasal medications with nasal mucosa and proof of their harmlessness in the lungs have been factors influencing the medical profession to prefer them to oily preparations.

There are many formulas for oily nose drops and sprays. They are basically the same, usually containing various combinations of aromatics, antiseptics and vasoconstrictors. Formulas used in the early years of the twentieth century have been altered but little. Nose sprays and drops have been official since the fourth edition of the National Formulary.

Since there are no official formulas for isotonic aqueous intranasal medications, and since pharmacists are frequently requested to compound such preparations, two formulas are suggested for inclusion in the next edition of the National Formulary.

No. I

Isotonic Solution of Ephedrine Sulfate

Ephedrine Sulfate	1.0 Gm.
Chlorobutanol	0.5 Gm.
Physiological Solution of Sodium Chloride, a sufficient quantity, to make	1000 cc.

No. II

Dextro-Isotonic Solution of Ephedrine Sulfate

Ephedrine Sulfate	1.0 Gm.
Chlorobutanol	0.5 Gm.
Isotonic Solution of Dextrose and Sodium Chloride, a sufficient quantity, to make	1000 cc.

Isotonic Solution of Dextrose and Sodium Chloride may be used as the vehicle, as it has been claimed to be more pleasing and not so drying to the nasal mucosa as is Physiological Solution of Sodium Chloride.

If the solution is prepared aseptically with sterile normal saline solution, and in small amounts, the preservative may be omitted. Other preservatives and medicinal ingredients may be substituted in correct proportions. The solution may be colored if desired.

Physiological Solution of Sodium Chloride is not perfectly isotonic with the blood. It contains only 0.85 per cent of sodium chloride, whereas Margaria (10), by determination of osmotic pressures, has shown the range in men to be from 0.932 to 0.962, the average being 0.945. In women the values varied between 0.907 and 0.940, the average being 0.927. From this it may be seen that a considerable quantity of a non-electrolyte, particularly one of high molecular weight, may be added to Physiological Solution of Sodium Chloride without producing a seriously hypertonic solution.

Cryoscopic determinations of osmotic pressure were carried out with the following results:

Solution	Depression of Freezing Point	Osmotic Pressure (Atmospheres)
0.85% sodium chloride	0.478°	5.76
0.90% sodium chloride	0.566°	6.72
Ephedrine solution No. 1	0.649°	7.82
Ephedrine solution No. 2	0.691°	8.32

The osmotic pressure (P) was calculated by the formula (11):

$$P = 12.06 \Delta - 0.021 \Delta^2$$

Δ is the depression of the freezing point, corrected for undercooling.

For purposes of convenience the official isotonic solutions were used in preparing these

ephedrine solutions. It might appear that the finished preparations would be hypertonic and, therefore, irritating. Such is not the case. Both clinical (8) and laboratory evidence show that these preparations are not sufficiently hypertonic to cause any discomfort when used intranasally.

Conclusions

1. In view of the apparent dangers of oily intranasal medications to nasal mucosa and the possibility of lipoid pneumonia, secondary to their instillation, their promiscuous use appears to be unwise particularly for children and the aged.

2. Isotonic aqueous preparations appear to be the safer way for intranasal medications.

3. Two basic formulas are given for use by pharmacists in the preparation of isotonic nose drops and sprays. They are recommended for inclusion in the next edition of the National Formulary.

References

- (1) Proetz, A. W., *Ann. Otolaryngology and Rhinology*, 43 (1934), 450.
- (2) Proetz, A. W., *Ibid.*, 43 (1934), 457.
- (3) Laughlen, G. F., *Am. J. Path.*, 1 (1925), 407.
- (4) Walsh, T. E., and Cannon, P. R., *Ann. Otolaryngology and Rhinology*, 47 (1938), 584.
- (5) Paterson, J. L. E., *J. Path. Bact.*, 46 (1938), 151.
- (6) Goodwin, T. C., *Am. J. Dis. Child.*, 48 (1934), 309.
- (7) Anonymous, *Jour. A. Ph. A.*, 1 (1940), 34.
- (8) Proetz, A. W., *Ibid.*, 43 (1934), 450.
- (9) Walsh, T. E., and Cannon, P. R., *Ibid.*, 47 (1938), 606.
- (10) Margaria, R., *J. Physiol.*, 70 (1930), 417-433.
- (11) Morrow, C. A., and Sandstrom, W. M., "Biochemical Laboratory Methods," 2nd Edition, New York, 1935, page 60.

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The Kilmer Prize

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(5) The Kilmer Prize Committee will select the winner from the papers submitted, and the winner will be notified about two weeks prior to the date of the meeting in Detroit to enable him or her to make plans for attending it.

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HBBER W. YOUNGKEN, *Chairman*

The University of Michigan's fine collection of early printed books includes a medical treatise printed in 1466 by Ulrich Zell, once apprentice to Gutenberg.

National Dental Program

By G. C. SCHICKS, *Chairman*

Final Article in the Series

THIS is the last of a series of ten dental articles and formulas which have appeared monthly since last January in this publication. The formulas have also appeared each month for the past ten months in the *Journal of the American Dental Association* under the section conducted by the Council on Dental Therapeutics. A total of 66 formulas with explanatory notes concerning them have constituted the series. Many of the formulas are already in or are to go in the following well-known books: Accepted Dental Remedies, The National Formulary and the A. P. H. A. Recipe Book. It is expected that the combined series will be made available to pharmacists and dentists soon. While this series of articles has been completed, the Committee on Dental Pharmacy of the AMERICAN PHARMACEUTICAL ASSOCIATION continues to offer a professional service to pharmacy and dentistry on dental medication.

Comments on Formulas

Myrrh and benzoin in 20% tinctures are often used as protective and healing agents. They are common ingredients in many mouth washes. They may be added with success to some of the higher alcoholic mouth washes previously published.

Tr. of Benzoin may be added to rose water and glycerin for local application to chapped hands or skin. It is important that the dentist's hands be in excellent condition at all times. Sometimes Tr. of Benzoin is used in plain aqueous solution. The tincture made from Sumatra Benzoin will give better results than when made from Siam Benzoin due to a greater gum content. About one-half per cent of tragacanth added to aqueous solutions of benzoin will overcome problems from precipitation and present a uniform suspension. Tr. of Benzoin is preferable to Tr. of Benzoin Co. for steam vaporizers. Due to the aloe content, Tr. of Benzoin Co. gives a disagreeable odor after the apparatus has operated for sometime.

Tr. of Myrrh is applied locally for ulcerative mouth conditions and sore throat. It is prescribed in gargles and painted on gums for irritation sometimes caused by artificial dentures.

Epithelium Solvent is used by the dentist and is not ordinarily prescribed for the patient's use. This solution is strongly alkaline. Sodium sulfide, the chief ingredient, occurs in colorless, deliquescent crystals. Care should be exercised in handling it as it is very caustic. It should be kept in a cool place in a well closed container. Its use, to dissolve tissue, is indicated by its name.

Iodine is the coloring agent used in disclosing solutions. It is called a disclosing solution because when applied to all surfaces of the teeth it stains bacterial and mucin films present so that sources of bacterial invasion may be more readily seen by the dentist. Stains on the teeth from this solution soon wear away. The disclosing solution has antiseptic as well as staining properties. Another solution used for the same purpose is Skinner's Disclosing Solution. It is composed of iodine crystals 5 parts, potassium iodide and zinc iodide each $1\frac{1}{2}$ parts, glycerin and distilled water each 25 parts.

Dentists are sometimes called upon to give treatment to patients who may later, as the occasion may demand, be advised to consult their physician. The dentist may use such agents as aromatic spirits of ammonia, atropine, caffeine, ephedrine, epinephrine, amyl nitrite and many others for emergency treatment or for purposes applicable to his own specialized practice.

Inquiry

Q. Please inform me where I can find some information about sodium para-hydroxymercuribenzoate. What are its uses and where can it be purchased?

A. In the September 1940 issue of the *Journal of the American Dental Association*, page 1379, you will find an article by Milton T. Hanke, Ph.D. on "Studies of the Local Factors in Dental Caries. I. Destruction of Plaques and Retardation of Bacterial Growth in the Oral Cavity," in which this agent is mentioned. Dr. Hanke states:

"Plaques disappear from teeth that are given ordinary care if the mouth is also carefully rinsed once or twice daily with certain antiseptic solutions, the best of which are solutions of the or-

ephedrine solutions. It might appear that the finished preparations would be hypertonic and, therefore, irritating. Such is not the case. Both clinical (8) and laboratory evidence show that these preparations are not sufficiently hypertonic to cause any discomfort when used intranasally.

Conclusions

1. In view of the apparent dangers of only intranasal medications to nasal mucosa and the possibility of lipoid pneumonia, secondary to their instillation, their pronounced use appears to be unwise particularly for children and the aged.

2. Isotonic aqueous preparations appear to be the safer way for intranasal medications.

3. Two basic formulas are given for use by pharmacists in the preparation of isotonic nose drops and sprays. They are recommended for inclusion in the next edition of the National Formulary.

References

- (1) Proetz, A W, *Ann Otolaryngology and Rhinology*, 13 (1931), 450
- (2) Proetz, A W, *Ibid*, 13 (1931), 157
- (3) Laughlin, G F, *Am J Path*, 1 (1925), 107.
- (4) Walsh, T E, and Cannon, P. R, *Ann Otolaryngology and Rhinology*, 17 (1938), 581.
- (5) Paterson, J L E, *J Path Bact*, 46 (1938), 151.
- (6) Goodwin, T C, *Am J Dis. Child*, 48 (1931), 309
- (7) Anonymous, *Jour A Ph A*, 1 (1940), 31.
- (8) Proetz, A W, *Ibid*, 13 (1931), 150
- (9) Walsh, T. E, and Cannon, P. R., *Ibid*, 47 (1938), 606.
- (10) Margaria, R., *J Physiol*, 70 (1930), 117-133.
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By G. C. SCHICKS, *Chairman*

Final Article in the Series

THIS is the last of a series of ten dental articles and formulas which have appeared monthly since last January in this publication. The formulas have also appeared each month for the past ten months in the *Journal of the American Dental Association* under the section conducted by the Council on Dental Therapeutics. A total of 66 formulas with explanatory notes concerning them have constituted the series. Many of the formulas are already in or are to go in the following well-known books: Accepted Dental Remedies, The National Formulary and the A. P. H. A. Recipe Book. It is expected that the combined series will be made available to pharmacists and dentists soon. While this series of articles has been completed, the Committee on Dental Pharmacy of the AMERICAN PHARMACEUTICAL ASSOCIATION continues to offer a professional service to pharmacy and dentistry on dental medication.

Comments on Formulas

Myrrh and benzoin in 20% tinctures are often used as protective and healing agents. They are common ingredients in many mouth washes. They may be added with success to some of the higher alcoholic mouth washes previously published.

Tr. of Benzoin may be added to rose water and glycerin for local application to chapped hands or skin. It is important that the dentist's hands be in excellent condition at all times. Sometimes Tr. of Benzoin is used in plain aqueous solution. The tincture made from Sumatra Benzoin will give better results than when made from Siam Benzoin due to a greater gum content. About one-half per cent of tragacanth added to aqueous solutions of benzoin will overcome problems from precipitation and present a uniform suspension. Tr. of Benzoin is preferable to Tr. of Benzoin Co. for steam vaporizers. Due to the aloe content, Tr. of Benzoin Co. gives a disagreeable odor after the apparatus has operated for sometime.

Tr. of Myrrh is applied locally for ulcerative mouth conditions and sore throat. It is prescribed in gargles and painted on gums for irritation sometimes caused by artificial dentures.

Epithelium Solvent is used by the dentist and is not ordinarily prescribed for the patient's use. This solution is strongly alkaline. Sodium sulfide, the chief ingredient, occurs in colorless, deliquescent crystals. Care should be exercised in handling it as it is very caustic. It should be kept in a cool place in a well closed container. Its use, to dissolve tissue, is indicated by its name.

Iodine is the coloring agent used in disclosing solutions. It is called a disclosing solution because when applied to all surfaces of the teeth it stains bacterial and mucin films present so that sources of bacterial invasion may be more readily seen by the dentist. Stains on the teeth from this solution soon wear away. The disclosing solution has antiseptic as well as staining properties. Another solution used for the same purpose is Skinner's Disclosing Solution. It is composed of iodine crystals 5 parts, potassium iodide and zinc iodide each $1\frac{1}{2}$ parts, glycerin and distilled water each 25 parts.

Dentists are sometimes called upon to give treatment to patients who may later, as the occasion may demand, be advised to consult their physician. The dentist may use such agents as aromatic spirits of ammonia, atropine, caffeine, ephedrine, epinephrine, amyl nitrite and many others for emergency treatment or for purposes applicable to his own specialized practice.

Inquiry

Q. Please inform me where I can find some information about sodium para-hydroxymercuribenzoate. What are its uses and where can it be purchased?

A. In the September 1940 issue of the *Journal of the American Dental Association*, page 1379, you will find an article by Milton T. Hanke, Ph.D. on "Studies of the Local Factors in Dental Caries. I. Destruction of Plaques and Retardation of Bacterial Growth in the Oral Cavity," in which this agent is mentioned. Dr. Hanke states:

"Plaques disappear from teeth that are given ordinary care if the mouth is also carefully rinsed once or twice daily with certain antiseptic solutions, the best of which are solutions of the or-

ganic mercurials. The most satisfactory results are obtained when these solutions are retained in the mouth for a period of two minutes. A 1:5000 solution of any of the organic mercurials now on the market is effective, but all, if used over a considerable period of time, have such undesirable effects as discoloration of the teeth, amalgamation with gold fillings, etc., and a metallic taste.

"A 1:5000 solution of sodium para-hydroxymercuribenzoate has been found to be completely effective and entirely free from the foregoing objectionable effects."

The mouth wash suggested by Hanke, called Solution 58, is made as follows:

"To 4.0 gal. of distilled water add 2880 cc. of U. S. P. glycerol, 30 cc. of 1.0 normal sodium hydroxide, 90 Gm. of C.P. sodium acetate, 450 cc. of a 1 per cent solution of sodium para-hydroxymercuribenzoate, 30 cc. of a 10 per cent solution of oil of peppermint in alcohol. Dilute with distilled water to 5 gal.

"To prepare the 1 per cent mercurial solution for use in the above formula, mix 10 Gm. of sodium para-hydroxymercuribenzoate, 10 Gm. C.P. sodium acetate and 5 cc. of 1.0 normal sodium hydroxide with sufficient distilled water to make 1000 cc. of the solution."

Sodium para-hydroxymercuribenzoate may be purchased from Eastman Kodak Company, Chemical Sales Division, Rochester, New York. Ten grams cost \$1.60.

The Hale Prescription Pharmacy
Lowell, Massachusetts
November 26, 1940

Dr. George M. Perkins
1314 Oak Road
Lowell, Massachusetts

DEAR DR. PERKINS:

We have now completed the tenth and last series of dental preparations as a professional service from our pharmacy. These formulas have a variety of purposes, such as a treatment for irritation from dentures, an epithelium solvent, a disclosing solution, a liquid soap and preparations to revive the fainting patient as well as those to relieve the symptoms from high blood pressure.

Benzoin and myrrh as tinctures are used daily by dentists because of their soothing and antiseptic properties. They can be incorporated in a number of combinations for use in the oral cavity. We can make a very pleasing mouth wash with Tr. of Myrrh as an ingredient.

May I bring your attention to the researches of Dr. M. T. Hanke on sodium para-hydroxymercuri-

benzoate as a new antiseptic agent for mouth washes in the September 1940 issue of the *Journal of the American Dental Association*, page 1391. We are ready to supply this mouth wash for your patients on prescription.

It has been a pleasure to provide you with a prescription service for the past ten months. If you care to have it continued please fill out the enclosed card. You will hear from us frequently about standard medication and new developments in dental pharmacy.

We appreciate very much the opportunity afforded us to serve you and your patients.

Very truly yours,
ROBERT W. HALE

Prescription Pharmacist
to the Dental Profession

Prescriptions—Series X

ABRASIONS

(a)	Metric	Apoth.
R	Approx.	Equivalents
Tr. Benzoin	15.0 cc.	℥ ss
Tr. Myrrh	15.0 cc.	℥ ss

M.

Sig: Apply for denture abrasions.

Note: Tr. Benzoin is a protective soothing agent. Tr. Myrrh is antiseptic and promotes restoration of abraded or diseased tissue to normal function.

Used to fix or seal drugs in gingival crevices.

EPITHELIUM "SOLVENT"

(b)	Metric	Apoth.
R	Approx.	Equivalents
Sodium Sulfide	17.5 Gm.	℥ iv gr. xl
Sodium Carbonate monohydrated	5.0 Gm.	℥ i gr. xv
Water to make	30.0 cc.	℥ i

Sig: For external use only.
Epithelium solvent.

DISCLOSING SOLUTION

(c)	Metric	Apoth.
R	Approx.	Equivalents
Potassii Iodidi	3.6 Gm.	gr. lvi
Iodi	3.6 Gm.	gr. lvi
Glycerini		
Aq. dest ā ā q. s. ad	120.0 cc.	℥ iv

Sig: Disclosing solution.

Note: Antiseptic and aids in disclosing dental caries.

One or two drops of methyl salicylate improves the odor and taste.

LIQUID SOAP

(d)
R

Potassium Hydroxide	90.0 Gm.
Sodium Hydroxide	90.0 Gm.
Cottonseed Oil	500.0 Gm.
Best Coconut Oil	500.0 Gm.
Alcohol	500.0 cc.
Water, sufficient to make	5000.0 cc.

Dissolve the alkalis in 200 cc. of water and just before solution is complete add 200 cc. of alcohol and all of the oils. Stir or agitate rapidly until completely saponified and clear. Then add the remainder of the alcohol and water previously mixed.

As a perfume use:

Menthol	20.0 Gm.
Oil of Clove	6.0 cc.
Oil of Cinnamon	6.0 cc.
Oil of Rose Geranium	45.0 cc.
Oil of Lavender Flowers	45.0 cc.

Mix and add to liquid soap as desired.

FAINTING

(e) R	Metric Approx.	Apoth. Equivalents
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Aromatic Spirit of Ammonia	60.0 cc.	℥ ii
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Sig: Give one-half teaspoonful in water.

Effect may also be obtained by inhaling the vapor of the spirit from a bottle or handkerchief.

Note: Aromatic Spirit of Ammonia is a useful reflex stimulant, antacid and carminative, having the action and uses of ammonium carbonate combined with those of the alcohol and volatile oil.

Dosage: 2 cc. (30 minims) freely diluted with water.

As the stimulating action is of short duration, a moderate dose may be repeated in from fifteen minutes to half an hour.

HIGH ARTERIAL PRESSURE

(f) R	Metric Approx.	Apoth. Equivalents
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Ampullæ Amylis Nitritis	0.2 cc.	m. iii
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D. t. d. No. XII

Sig: Break one in handkerchief and inhale vapor

Note: Amyl Nitrite may be obtained in 3 or 5 minim ampuls.

Relieves symptoms arising from high blood pressure.

Its effects are very transient. In hemorrhage with normal blood pressure it may do harm.

Substances producing similar effects are:

Tablets Nitroglycerin, 1/100 grain

Spirit Nitroglycerin, 1 minim

Tab. Diluted Erythryl Tetranitrate, 1/2 grain.

Are You a Proprietary Physician?

By CHESTER I. ULMER, M.D.

PHYSICIANS prescribe too many proprietary preparations. It is quite evident that the physician has become more and more a mere distributor of ready-made medicines.

When a physician prescribes a proprietary preparation by its coined name he not only flatters the preparation but he also generously aids the manufacturer in his attempt to familiarize the public with his product. Aside from the financial loss to the physician, there is considerable danger to the public in the practice of self-treatment.

Pharmacists in general report a large over-the-counter demand for certain proprietary preparations. So far as we are aware, these products have never been advertised directly to the laity. It therefore appears evident that the growing self-medication demand for these products results from either the ability of the patient to read the doctor's prescription on account of its easily deciphered name or the unwise distribution of samples by the doctor. In either event there is no question but what the physician *himself* is largely to blame for the public's familiarity with many proprietary preparations.

There are many examples of the misuse of popular remedies. We are particularly conscious of the danger involved in the promiscuous and ill-advised use by the public of the many antacid-alkalizer preparations now on the market. Physicians can help to correct this evil by restricting their prescriptions for this type of remedy to formulas which have titles not easily recognized as are certain coined names. For instance, R Pulvis Bismuth Subnitratris Compositus, N.J.F., will not be easily deciphered by the patient and hence will not lend itself to self-medication. In addition, this formula is a very efficient antacid.

It should be remembered that the proprietary prescribed by the physician to-day is the patent medicine advertised to the public to-morrow.

Physicians should restrict their prescriptions to ethical formulas. By so doing, the art of prescription writing will be revived and ethical formulas more generally compounded.—*Journal of the Medical Society of Cape May County (N. J.)*

What You Mean to the American Pharmaceutical Association

By ERNEST LITTLE, *Chairman*

Committee on Local and Student Branches of the A. Ph. A.

"To advance the science and art of pharmacy; to stimulate research and improve methods; to diffuse scientific and professional knowledge; to foster sound pharmaceutical education and training; to limit the practice of pharmacy to trained pharmacists; to increase the observance of proper standards of identity, purity and strength of drugs and medicines and to prevent their adulteration; to regulate the use of habit-forming and dangerous drugs; to develop coöperation between medicine, dentistry, pharmacy and other public health professions; to extend the usefulness of the pharmacist to the people; to improve the practice of pharmacy and the status of the pharmacist; to preserve all that is best in the profession and industry."

The above quotation is a statement of the aims and objectives of the AMERICAN PHARMACEUTICAL ASSOCIATION, which organization is the sponsor of the Journal which you are now reading.

The accomplishments and current activities of this ASSOCIATION are in accord with its formal objectives.

As the oldest pharmaceutical association in this country it has assisted in the organization of other national and state pharmaceutical organizations where it was thought a real need existed for such organizations.

It has played its full part in developing and protecting the practice of pharmacy in many ways. It has been helpful in promoting the cause of pharmaceutical education. It promoted the formation of the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy as well. It has contributed richly to the development of the United States Pharmacopœia, which is now generally recognized as the best of such books of standards. It has established and developed the National Formulary and secured the adoption of both of these books as government standards under the Pure Food and Drugs Act. It established the Pharmaceutical Recipe Book, which is intended to provide reliable formulas which are not included in the United States Pharmacopœia and National Formulary.

These are but a few of the many things which it has done and is now doing in behalf of your profession. Its activities have not been spectacular, but they have been profound and very definitely worth while. They have literally laid the foundation on which your profession is built, and the ASSOCIATION is determined to keep that foundation adequate and secure.

The national office of the AMERICAN PHARMACEUTICAL ASSOCIATION is located in its own building on Constitution Avenue, Washington, D. C., opposite the Lincoln Memorial. The next time you are in Washington visit at your building and witness the activities which are being carried on there. You will find a warm welcome awaiting you and will leave with a little more adequate idea of the many things the AMERICAN PHARMACEUTICAL ASSOCIATION is doing for you and your profession.

In addition to the offices of the national officers, this building houses a reference library, an historical museum and scientific laboratories devoted to the investigation of problems of research in the field of pharmacy and closely allied sciences. This beautiful building and the many activities which it houses are decided assets to pharmacists individually and a great credit to their profession.

Satisfactory as this development may seem to be, we must recognize the fact that the AMERICAN PHARMACEUTICAL ASSOCIATION is not and cannot be a static organization. It must prove adaptable and continue to change with the times.

The present national and international crises have placed a greater burden on your ASSOCIATION than has ever before existed. The various bureaus, departments and offices in the nation's Capitol are constantly calling on the Secretary for increasing services in your behalf. Dr. Kelly has responded nobly, as you might expect, but he must have more help and a larger staff if your interests are to be adequately safeguarded.

The ASSOCIATION's services to the profession should be constantly growing and expanding.

This can only be done if each one of us is willing to make a modest contribution to the profession which is furnishing us with a livelihood.

An increased membership would provide the budget with the flexibility which is essential to such services.

Won't you please ally yourself a little more closely with the forces which are working for pharmacy by joining the oldest and most thoroughly representative pharmaceutical association in this country, viz., The AMERICAN PHARMACEUTICAL ASSOCIATION?

This ASSOCIATION has done more to promote pharmacy as a profession than any other body. It now requests that you help it help you. Won't you please fill out the application blank which is on page IX of this issue and return it together with a check or money order for five dollars to Secretary E. F. Kelly, 2215 Constitution Avenue, N. W., Washington, D. C., without delay?

Please understand that we do not wish you to join the AMERICAN PHARMACEUTICAL ASSOCIATION in preference to the National Association of Retail Druggists or your state or county associations. These organizations are in no sense competing with each other but rather do they complement each other. Each is in a sense dependent upon the other and all must be kept strong by the pharmacists of the country, in whose interests they are organized. You should belong to all four of these organizations and can do so for an annual expenditure of about thirty-five dollars. Can you afford to invest a little less than ten cents a day in the welfare of your profession and your own private welfare as well? Can you afford not to do so? We believe we know what the answer of the thoughtful man and the keen business man will be. It will cost you but 1.37 cents a day to become a member of the AMERICAN PHARMACEUTICAL ASSOCIATION.

If the individual members of our profession would make it possible for us to go forward with the united front which we have suggested, no power on earth could retard our progress and our profession would rise to heights of prestige and usefulness never before thought possible.

We shall look forward to receiving your application blank in the near future. Dues paid from now until January 1, 1941, cover not only the remainder of the current year but the ensuing year 1941 as well.

You are a member of the profession of phar-

macy. You desire to prove successful, not only for your own sake but for the people whom you serve. We are asking your coöperation to make possible the achievement of such a goal.

Drug Topics Acquires Druggists Circular

The *Druggists Circular* and the Druggists Circular Red Book Price List have been purchased by the Topics Publishing Co., Inc., publishers of *Drug Topics* and *Drug Trade News*. After the November 1940 issue, the eighty-three-year old *Druggists Circular* will be combined with *Drug Topics*.

The new owners announce that the most valuable features of *Druggists Circular* will be added to *Drug Topics* which will bear the new masthead: *Drug Topics with Which Is Combined Druggists Circular*. It is also announced that The Druggists Circular Red Book Price List, for 44 years a price reference book for the druggists of the nation, will be revamped to increase its usefulness.

A New Narcotic Fraud

Commissioner Anslinger of the Federal Narcotic Bureau calls attention to a ruse which illicit narcotic traffickers are attempting in some sections to perpetrate on the families of deceased physicians.

Apparently these peddlers watch the daily papers for the death notices of physicians, then call upon the widows or other members of the families, represent themselves to be "narcotic appraisers" and seek by one means or another to induce the survivors to turn over to them whatever narcotics may be among the effects of the deceased.

So far, the reported attempts to perpetrate this fraud have involved only physicians but it is probable that it may also have been attempted in connection with druggists' stocks.

Widows and other heirs of deceased pharmacists should be advised of the possibility of this type of fraud.

Readers' Comment

From Colombia comes the following: "I am writing to learn how I can receive regularly your famous pharmaceutical publication. I am eager that our pharmacy should approach more closely that of America. I believe one of the best means of knowing your progress and methods would be through the JOURNAL of the A. PH. A."

A member in Tennessee writes: "Delighted that 'New Remedies and Specialties' are now included in the Practical Pharmacy Edition."

New Remedies and Specialties

From the pharmaceutical journals of the world these abstracts are culled by a staff of scientists working as collaborators with the Editor of the Scientific Edition of THIS JOURNAL. They appear regularly in the Scientific Edition. If you desire to have them continued here regularly we must receive enough requests to warrant reprinting.

NEW REMEDIES

Synthetics

Amphojel Tablets (John Wyeth & Bro., Inc., Philadelphia, Pa.) contain in each tablet the equivalent of 10 gr. of hydrated alumina [$Al_2(OH)_6$] and produce the antacid effect of about two teaspoonsful of liquid. The tablets are used in the treatment of hyperacidity and peptic ulcers; and they are offered as a convenient supplement to gel therapy in treating ambulatory patients. Amphojel Tablets are supplied in boxes of 60 tablets.—*Amer. Professional Pharmacist*, 6 (1940), 451. (F. J. S.)

Astreptine is the name given by the Union Chimique Belge, to sulfanilamide.—*Pharm. Weekblad*, 76 (1939), 1520. (E. H. W.)

Betamin (Cerevin Products Corp., 100 Sixth Ave., New York, N. Y.) contains in each wafer 100 International Units (0.3 mg.) thiamin hydrochloride U. S. P. XI (vitamin B_1) and is low in caloric value (15 calories per wafer). It is used for restricted diets or whenever vitamin B_1 deficiency is indicated. Betamin is advertised only to physicians and is distributed only through pharmacies in hermetically sealed one-half pound tins.—*Amer. Professional Pharmacist*, 6 (1940), 450. (F. J. S.)

Be-Vitrat (Nordmarkwerke, Hamburg) contains the vitamin B complex, increased with vitamin B_1 and with peptidhydrochlorides which prevent the breaking down of the B vitamins in the gastrointestinal tract. The preparation is found on the market in drops, ampuls and bean-shaped dragees.—*Pharm. Weekblad*, 76 (1939), 1136. (E. H. W.)

Cortiron is synthetic crystalline desoxycorticosterone acetate presented in oily solution for intramuscular injection. It enables an adequate and exactly dosed cortical hormone therapy to be used for the treatment of diseases due to suprarenal insufficiency, such as Addison's disease, war neurosis, shock due to burns, and frost bite and severe toxic diseases which cause suprarenal exhaustion. A daily dose up to 10 mg. can be given, and, as no secondary effects have been observed, overdosage would appear to be extremely unlikely. Cortiron is supplied in boxes of 4 ampuls containing either 2, 5 or 10 mg.—*Quart. J. Pharm. Pharmacol.*, 13 (1940), 95. (S. W. G.)

New Remedies. The following new preparations have been placed on the market recently: Foille, a water-in-oil emulsion used for the treatment of burns; Liquemin, 1 cc. containing 4 mg. of heparin powder corresponding to 2000 anticoagulant units, used to retard the coagulation of blood; Nebadrene "Pabryn," an atropine-pilocarpine compound, used for the treatment of bronchial asthma and hay fever; Perandren Ointment, each Gm. of the ointment containing 2 mg. of testosterone, used locally for hypo-

gonadism and chronic mastitis; Sonasta, which are tablets containing ethylbromisovalerylamine and oxypropionylaminoethoxybenzene, used for soporific properties.—*Pharm. J.*, 144 (1940), 32. (W. B. B.)

Specialties

All-vi-ron (Professional Laboratories, Inc., Bloomfield, N. J.) contains in each perle not less than 7000 I. U. vitamin A as concentrated fish liver oils; 50 I. U. vitamin B_1 as thiamin hydrochloride and vitamin adsorbate from rice polishings, whey and wheat germ; 65 I. U. vitamin C as ascorbic acid (approximately $\frac{1}{3}$ daily need); 900 I. U. vitamin D; 30 micrograms of vitamin B_2 (G) as riboflavin, adsorbate from rice polishings, whey and wheat germ (approximately $\frac{1}{3}$ daily requirement); 25 mg. cold pressed wheat germ oil as minute source of vitamin E (α -tocopherol) and 0.0508 Gm. U. S. P. ferrous sulfate (dried) equal to 15 mg. iron. It is indicated as a necessity for the body's preservation where deficiency diseases may be present which may cause serious manifestations due to the lack of the essential element iron. The dose is 1-2 perles daily with any meal. All-vi-ron is obtainable in packages of 100 perles.—*Amer. Professional Pharmacist*, 6 (1940), 250. (F. J. S.)

Almedine (N. V. Orgachemia, Oss) is a new analgesic with vitamin B_1 , that does not contain pyrazolones. Because of the danger of agranulocytosis from the use of pyramidon and other pyrazolone derivatives, necessitating that their use be under the control of the physician, it was suggested that the trade be furnished with a preparation that did not have these dangers. Recently the antineuritic vitamin B_1 has been used in neuralgias and is therefore administered in combination with acetylsalicylic acid, phenacetin and citrated caffeine. The combination is as follows: vitamin B_1 0.150 mg.; citrated caffeine 50 mg.; phenacetin 200 mg. and acetylsalicylic acid 200 mg. per tablet.—*Pharm. Weekblad*, 76 (1939), 1520. (E. H. W.)

Arthex Tablets (Sagitta-Werk, G. m. b. H., München) are marketed in two forms: Grade I (brown) contains phenyl-quinoline carboxylic acid and amidophenazon; and Grade II (white) contains acetylsalicylic acid and bromoisovaleryl urea. They are indicated in the treatment of arthritis and neuralgia.—*Pharm. Zentralhalle*, 80 (1939), 509. (N. L.)

B-Compules (Abbott Laboratories, North Chicago, Illinois) contain in each compule 333 U. S. P. units of vitamin B_1 (1 mg. of thiamin hydrochloride), 40 Sherman units of vitamin G (approximately 100 gammas of riboflavin), and other members of the vitamin B complex found in liver concentrate. The

(Continued on Page 419)

compules are indicated in conditions of vitamin B complex deficiency. The average dose is 1 to 3 capsules daily and one capsule provides recognized daily prophylactic dose of thiamin hydrochloride for adults and supplements the diet by supplying $\frac{1}{10}$ of the estimated minimum daily requirement of riboflavin. B-Compules are supplied in bottles of 40 and 500.—*Amer. Professional Pharmacist*, 6 (1940), 250. (F. J. S.)

Byleric Capsules (Wm. S. Merrell Co., Cincinnati, Ohio) are modified choleic capsules containing 11 gr. ricinoleic acid combined with 1 gr. of bile salts, encapsulated in soft gelatin. They are used as an improved cholagogue-choleretic. Byleric Capsules are supplied in boxes of 40 and 100 capsules.—*Amer. Professional Pharmacist*, 6 (1940), 181. (F. J. S.)

Cosanyl (Syrup Cocillana Compound) (Parke, Davis & Co., Detroit, Mich.) contains in each fluid ounce 120 minims Tinct. Euphorbia Pilulifera, 120 minims Syrup Wild Lettuce, 40 minims Tinct. Cocillana, 24 minims Syrup Squill Compound, 8 gr. cascarin (bitterless), $\frac{1}{4}$ gr. ethyl morphine hydrochloride, $\frac{8}{100}$ gr. menthol. It is used as a sedative-expectorant; indicated for relief of cough associated with scanty secretion and expectoration. Cosanyl is supplied in 4-oz., 16-oz. and 1-gallon bottles.—*Modern Pharmacy*, 24 (February, 1940), 13. (F. J. S.)

Davitamon B₁ (N. V. Orgachemia, Oss) is the antineuritic vitamin or aneurin, discovered by Eykman in 1897 and by Grijns in 1901, investigated as a remedy for beriberi and later obtained in crystalline form by Jansen and Donath. This vitamin is offered as Davitamon B₁ in tablets of 1 mg. and in ampuls 1 and of 10 mg. per cc. One milligram corresponds to 33 International Units.—*Pharm. Weekblad*, 76 (1939), 152. (E. H. W.)

Davitamon K (N. V. Orgachemia, Oss) consists of the antihemorrhagic vitamin obtained by Dam in 1934, dissolved in oil. This vitamin, an oil soluble compound, keeps the normal concentration of prothrombin in the blood and thus prevents a diminution of the coagulability of the blood. Vitamin K is found in a number of green plants including lucern and spinach and also in fish meal. In various forms of icterus which show a tendency toward hemorrhagic diathesis the state of a lowered blood coagulation represents an occasion for the prophylactic administration of Davitamon K. Davitamon K is found on the market in 15-cc. dropping bottles, containing 20,000 Dam units per cc. For combination therapy cachets of 0.4 Gm. of desoxycholzaur-Organon are also obtainable.—*Pharm. Weekblad*, 76 (1939), 1521. (E. H. W.)

Deterzit (Bika, Chem.-pharm. Fabrik, Stuttgart) is a coal-tar paste containing solution of coal-tar, zinc paste and lanolin. It is indicated in the treatment of chronic eczema, herpes, pruritis, furunculosis, skin fissures, etc.—*Pharm. Zentralhalle*, 80 (1939), 567. (N. L.)

Disulfamine (Laboratori Biochimici, Locarno) is a combination of hexamethylenetetramine-sulfosalicylate, sodium nucleinate and camphoric acid-dimethylaminoantipyrine. It is used as a sedative and antipyretic having at the same time antiseptic properties and is found on the market in tablet form.—*Pharm. Weekblad*, 76 (1939), 1136. (E. H. W.)

Ikasit (Chem.-pharmaz. Fabrik "Mainfranken," Würzburg) consists chiefly of iodine, menthol, camphor, capsicum, aconite and ethereal oils. It is

recommended as a liniment.—*Pharm. Zentralhalle*, 80 (1939), 510. (N. L.)

Kolavotine is a vegetable food for illness and convalescence made according to the formula of Professor Astier of Lausanne. It contains, among other things, defatted cacao, oatmeal, kola and aromatics.—*Pharm. Weekblad*, 76 (1939), 1521. (E. H. W.)

Lepetin (Utrecht and London) is an emulsion with 20% lecithine. It is used in convalescence, in lack of appetite, in arteriosclerosis, etc. The dose is one tablespoonful three times a day for adults. It is flavored with peppermint and vanilla and in a stronger form has silicic acid added.—*Pharm. Weekblad*, 76 (1939), 785. (E. H. W.)

Puerperal Bacterin Mixed (Sharp & Dohme, Philadelphia, Pa.) is a bacterin representing pathogenic strains of bacteria collected from the cervix and endo-cervix of pregnant women; and it is standardized to contain 2000 million killed organisms per cc. (streptococcus (hemolytic) 700 million, streptococcus (viridans) 300 million, streptococcus (non-hemolytic) 200 million, *staphylococcus aureus* 300 million, *staphylococcus albus* 200 million, colon bacillus 300 million). It is used as a prophylactic immunization against puerperal sepsis associated with child bearing and it is administered parenterally, under the direction of a physician. The bacterin is supplied in packages of 5-cc. and 20-cc. vials.—*Amer. Professional Pharmacist*, 6 (1940), 385. (F. J. S.)

Rabellon (Sharp & Dohme, Philadelphia, Pa.) is a compound of belladonna alkaloids containing hyoscyamine hydrobromide, atropine sulfate, scopolamine hydrobromide; and the combined amount in each tablet is equivalent to 0.5 mg. of total alkaloids expressed as hyoscyamine hydrobromide in approximately the proportions found in Bulgarian belladonna root. It is indicated in the symptomatic relief of Parkinson's disease, paralysis agitans or shaking palsy which is a chronic progressive disease of the central nervous system. Rabellon is to be used under the direction of a physician. It is supplied in bottles of 100 and 1000 quarter-sected tablets.—*Amer. Professional Pharmacist*, 6 (1940), 314. (F. J. S.)

Riona Capsules (Sharp & Dohme, Philadelphia, Pa.) combine propadrine hydrochloride $\frac{3}{4}$ grain, acetophenetidin 2 grains and acetylsalicylic acid 3 grains in a dry-filled capsule. It is used in the symptomatic relief of spastic dysmenorrhea; of neuralgia, coryza, rhinitis and malaise of the common cold; and of headache when associated with rhinitis of hay fever. The dosage is: dysmenorrhea, at the onset of distress the patient should be given one capsule, which may be repeated three or four times a day. In severe cases, one capsule may be repeated every three hours. The capsules may be continued throughout the period. For common colds and hay fever, one capsule every three or four hours. Riona Capsules are supplied in boxes of 30 and 100 capsules which are individually wrapped in cellophane.—*Amer. Professional Pharmacist*, 6 (1940), 385. (F. J. S.)

Strophosid (J. Flint, Sandoz Products, London) is a new glycoside, *k*-strophanthosid, isolated from seeds of *Strophanthus kombé* in pure crystalline state. It is used in cases of cardiac weakness. The dose in ampuls (1 cc. = 0.0005 Gm. *k*-strophanthosid): 0.4-1 cc. per day. It is marketed in boxes of 3, 6 and 50 ampuls.—*Australasian J. Pharm.*, 21 (1940), 360. (A. C. DeD.)

Local and Student Branches

UNIVERSITY OF SOUTHERN CALIFORNIA STUDENT BRANCH.—On November 4th a Luncheon-Meeting was held in the Tea Room of the Students Union Building, with President M. Tennenbaum presiding. Several issues were proposed and passed upon, as follows:

(1) To present a plaque to the pharmaceutical organization obtaining a 100% membership in the A. PH. A.

(a) This plaque to remain in the hands of the winning organization for a period of one year.

(b) If the same organization wins this honor for three consecutive years the plaque will be given to said organization.

(2) An all-college membership drive.

(3) Any member who obtains ten new members for the A. PH. A. will be given a free membership for the following year.

Dean A. G. Hall gave an informal talk on "Unions in Pharmacy," the sum and substance of his talk being to show that to be strong pharmacists must be banded together and that this union should be through the A. PH. A. rather than through a labor union.

EVELYN P. PRACOCK, *Secretary*

LOYOLA UNIVERSITY BRANCH.—In former years it has been the policy of our branch to plan at the end of one meeting for our next meeting. This year, however, all of our meetings for the year are already scheduled and a definite program carried out. We have had five hundred of these programs printed and each student is charged to acquaint the pharmacists in his respective district with our activities by distributing to them this leaflet. We hope that this will arouse interest of the local pharmacists, and that by their attendance at our meetings they will benefit themselves and the students of pharmacy. The program for the season follows:

November 7, 1940—"Malaria." An unusual presentation of the wonderful aspects of this widespread disease.*

December 5, 1940—"The Vitamins." Information concerning vitamin requirements for human beings and the current clinical status of the recognized vitamins.*

January 9, 1941—"American Crude Drugs." Collection, commerce, history and valuation of some of America's important crude drugs.*

February 6, 1941—"The Doctor and The Pharmacist." Co-workers in the program of public health.*

* Program includes motion picture.

March 6, 1941—"Student Inquiry." Students question experienced pharmacists about their profession. Open forum about pharmacy.

April 3, 1941—"Anti-Snake Bite Serum." A complete treatise on the subject of snake serum and a demonstration with live snakes.*

May 8, 1941—Annual Banquet and Dance.

NORTHERN NEW JERSEY.—The first meeting of the Branch for 1940-1941 was held at Rutgers University College of Pharmacy, October 21, at 8:30 P.M. The feature of the evening was an informal talk by Dr. E. F. Kelly, secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION, who outlined the position of the pharmacist in government service. The branches of the service that use the pharmacist in his professional capacity being: Public Health, Army, Army Reserve, Navy, Veterans' Administration and Narcotic Bureau.

Dr. Kelly urged pharmacists to enroll in the census that is being taken by the Red Cross for national emergency. Such enrollment, he said, would best insure conscripted men of their being placed in the service where they are best fitted. It was predicted that very few pharmacists would be called. This was based on the calculation that four million men (the largest number spoken of as a conscript army) represented one-thirty second of the national population. Since there are 105,000 pharmacists three thousand would represent one-thirty second of that number, or about 750 per year over a four-year period. Many of these would be placed in Class II because of dependents or Class III because of their necessity to the community for civil health protection.

This talk coming on the eve of the conscription drawing aroused much interest. Dr. Kelly invited questions from the audience and these questions and their answers provided further proof of the value of the pharmacist in national defense.

Following the talk by Dr. Kelly, Dr. Little invited and strongly urged all those present to join the AMERICAN PHARMACEUTICAL ASSOCIATION both for their own benefit directly and to assist the association in carrying on its program.

C. L. Cox, *Secretary*.

NEW YORK.—The regular meeting was held at the Columbia University, College of Pharmacy on November 11th. About seventy-five members and guests were present. Minutes of the October meeting were approved. Mr. F. Schaefer, chairman of the Membership Committee reported that he had received from Dr. Kelly, a list of seventy-one mem-

bers who had not as yet paid their dues for 1940. He was at work contacting these members and endeavoring to have them remove their delinquency.

Mr. Lehman reported for the Committee on Education and Legislation, and Dr. Ligorio for the Committee on the Progress of Pharmacy.

Dr. Schaefer announced that the Remington Medal Dinner in honor of Dr. Robert L. Swain would be held at the Hotel Pennsylvania on Thursday, November 28, 1940 at seven P.M. Some announcements were already out and others were ready to go in the near future. Reservations were already coming in.

Mr. F. D. Lascoff reported that the observance of Pharmacy Week in this area was quite successful. Pharmacists had cooperated in a splendid manner and many prominent men were heard over the radio.

Mr. Robert Lehman reported with deepest sorrow the passing of Mr. George Decker, a faithful member for many years.

It was announced that the next regular meeting in acceptance of an invitation extended by the Kings County Pharmaceutical Association, would be held in the Brooklyn College of Pharmacy. Starting January 1, 1943, the Education Law of the State of New York will require one year of practical experience in a pharmacy after graduation in order to be eligible for State Board of Pharmacy Examination. Based on this the next meeting will be a forum discussion on "The Nature and Control of Drug Store Experience for State Board Candidates."

The meeting turned to the Scientific Section with Mr. Gustave Bardfeld presiding, and he expressed his thanks to Mr. Stanley W. Rosenfeld for assistance given in arranging the program.

The speakers were Dr. M. L. Crossley, Director of Research, Calco Chemical Division, American Cyanamid Company, on "The Research and Development of the Sulfanilamides," and Dr. Elmer H. Loughlin, Instructor in Medicine, Long Island University, College of Medicine on the "Chemotherapy of Infections."

At the conclusion of an extended discussion, a rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

WESTERN NEW YORK.—The regular meeting was held at the University of Buffalo on November 7th. President Seibert called the meeting to order and announced the tentative schedule for monthly meetings for the fiscal year. A meeting to be held in Rochester was planned for May 8th.

It was moved, seconded and carried that the Local Branch cooperate with the "Medical and Surgical Supply Committee of America" in an attempt to collect pharmaceutical supplies for use in emergency hospitals and first aid stations in England.

The speaker of the evening was Dr. Victor L.

Cohen, M.D., prominent local specialist in allergy, who presented by means of moving pictures and lecture a comprehensive but simple explanation of the manifestations of allergic reactions and methods for their control.

Dr. Cohen pointed out that there were five types of allergic reactions: anaphylaxis, serum sickness, hypersensitiveness to infection, contact dermatitis and atopy. Anaphylaxis is found only in lower animals, being a response of a previously sensitized animal to protein injection. Serum sickness is a normal reaction of humans; the skin should be tested before injections of serums. Tuberculin sensitivity is an example of hypersensitivity to infection. Contact dermatitis is the most frequent type of allergy encountered, there being countless substances which may be allergic. Atopy is a strange disease resulting apparently from a hereditary allergy; examples are asthma, hay fever, etc.

The moving pictures were actual clinical cases on colored film to illustrate the five types of allergic reactions discussed. A fifteen minute intermission followed, during which a collation of doughnuts and coffee was served.

Following the intermission, there was a general discussion with answers by Dr. Cohen to a number of questions written by the audience.

The meeting was adjourned until Thursday, December 5th, at which time the joint program with the Pharmacy Alumni Association will consist of sound moving pictures "Medical Regiment," which will illustrate the activities of the Army Medical Corps. A Medical Corps Officer will discuss the place of the pharmacist in the Medical Corps.

GEORGE W. FIERO, *Secretary*

PHILADELPHIA.—The regular monthly meeting was called to order, November 12th, at the Philadelphia College of Pharmacy and Science. Minutes of the October meeting were approved.

Dr. James, chairman of the Program Committee, announced that Dr. Justin Powers, Chairman of the National Formulary Revision Committee, would address us at the December meeting.

Chairman Leberknight announced that certain persons had recently joined the parent body and requested that they be admitted to membership in the Local Branch. On motion, the following were elected to membership: Elvira Cirelli, Eugene Brody, Harold Clymer, Gilbert Davis, William Heymann, A. Kremeus, S. W. Leidich, Samuel Price and Harry Rosen.

The Secretary conveyed the invitation of the New York Branch to attend a testimonial dinner to Dr. Robert L. Swain at Hotel Pennsylvania on November 28th, at which time the Remington Medal would be presented to him.

Dr. Dunn extended the invitation of Dr. Jenkins,

chairman of the Section on Pharmacy, to attend the Christmas meeting of the American Association for the Advancement of Science at the Bellevue-Stratford on December 28th.

Dean Kendig advised that he had been authorized by the Surgeon General's office to announce that qualified pharmacists holding a B.S. degree in Pharmacy would receive a commission of 2nd Lt. in the Army, as long as there were vacancies for this position. There is also an opportunity for men with less academic training to serve 3 months in the regular Army and then to receive the rating of Technical Sergeant. He also advised that one could still apply to take the civil service examinations for pharmacists.

The Chairman stated that pharmacy had lost one of its leaders in the death of Richard Lackey and requested that Dr. Wood draw up a resolution of sympathy.

Chairman Leberknight introduced Dr. John C. Krautz, Jr., Professor of Pharmacology of the School of Medicine of the University of Maryland, who spoke on "General Anesthesia and Cyclopropane Derivatives."

Dr. Krantz introduced his subject by briefly reviewing the history of anesthesia starting with the preparation of laughing gas by Joseph Priestley and following through the discovery and use of ether, chloroform and ethylene oxide. After studying the chemical structure and physiological action of various anesthetics, Dr. Krantz and his colleagues predicted that the various alkyl ethers of cyclopropane should have the properties of a good anesthetic. He described how they had prepared these compounds, starting with glycerin, replacing the terminal OH groups with bromine, and then converting the central OH group into the methyl ether by treating it with methyl sulfate. The resulting compound was treated with zinc to form cyclopropyl methyl ether. They coined the name Cyprone Ether for this chemical. He predicted it might be possible to also produce the dicyclopropyl ether and the ethylene ether of cyclopropane. Dr. Krantz then compared the pharmacology of Cyprone ether with ethyl ether. It has a short period of induction. The subject returns to normal without excitement. Cyprone ether is stronger, being effective in lower concentrations. It also has a greater safety factor. There does not appear to be any damage to the liver, kidneys or other organs with repeated anesthetizations. It does not affect the chemistry of the blood, with the exception of blood sugar, which normally rises during anesthesia. Preanesthetic agents are physiologically compatible with Cyprone Ether.

Dr. Krantz stated that the new anesthetic had worked satisfactorily in 25 cases and that clinical study was being continued.

The meeting was opened to discussion and Dr. Krantz answered various questions. A rising vote of thanks was extended to the speaker.

R. H. BLYTHE, *Secretary*

STATE COLLEGE OF WASHINGTON.—An open meeting was called to order on October 2nd, by President Honodel. The secretary read the minutes of the previous meeting and an account of the annual A. PH. A. banquet which had been held on May 28th in conjunction with the Latah-Whitman Counties Druggists Association, at which representatives of the medical, dental, pharmaceutical, nursing and other health professions were present. Dr. Dirstine suggested that a guest list be made and attached to the records.

Mr. Honodel appointed two membership committees to compete against one another for a prize which would be awarded at a later date. On one committee he appointed Mr. Beach, Miss Church and Mr. Helgeson; on the other, Messrs. Whipps, Martin and David Slagle.

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A further meeting was called to order on October 23rd, by President Honodel. Mr. Honodel introduced Mr. Ray Felt and Mr. A. J. Longpre of E. R. Squibb and Sons. Mr. Felt is the Spokane representative while Mr. Longpre is professional service manager of the Northwest. Mr. Felt gave a synopsis of the development of the Company starting 90 years ago when Dr. Edward R. Squibb, a navy physician, set about to purify drugs, which he discovered gave better results. He first established governmental laboratories and later his own. Dr. Squibb did most of the final research work on ether, credit being given him even in our modern textbooks.

An instructive talking film was shown which called attention to the fact that the vitamin business in this country increased from \$500,000 in 1933 to \$75,000,000 in 1939. The film showed the uses of the more common vitamins.

A vote of thanks was accorded the speakers.

HAAKON BANG, *Secretary*

Ergot from Portugal

Portugal was the outstanding supplier of ergot, including ergosterin and ergosterol, to the United States in the first 8 months of the current year. Imports aggregated 91,330 pounds, valued at \$175,461, of which Portugal supplied 80,592 pounds, Spain 8466 pounds and Hungary 2272 pounds.

OBITUARY

Henry Hurd Rusby

Dr. H. H. Rusby, former president of the AMERICAN PHARMACEUTICAL ASSOCIATION, died on November 18th, in Sarasota, Florida, aged 85 years. He had been in ill health for some time.

Dr. Rusby was born in Franklin, N. J., in 1855. When he was 17, Dr. Rusby entered Massachusetts State Normal School, but was compelled to drop out after a year because his father's financial fortunes waned. In 1876 he was awarded a medal at the Centennial Exhibition for an herbarium of plants of Essex County, New Jersey.

In 1884 he graduated from the University Medical College of New York University. As Assistant at the Smithsonian Institution he made botanical explorations through Arizona and New Mexico, of interest to medical botany. He explored South America, 1885-1887, crossing the continent. Later he entered the service of Parke, Davis & Co., which resulted in a continuation of botanical explorations and employment with the firm as botanist and pharmacognosist. In 1884 the anesthetic properties of cocaine were discovered and he was sent to South America to make a thorough study of the coca plant and other South American drugs including the cheken plant and to secure supplies.

From 1888-1930 Dr. Rusby was professor of Botany, Physiology and Materia Medica, Department of Pharmacy, Columbia University, and Dean of the Faculty. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1890, being honored with the Presidency in 1909-1910; had served on the Revision Committee, 7th, 8th and 9th revisions, U. S. P.; on the Revision Committee of the National Formulary; as chairman of the Commission Pan-American Medical Congress for study of American medicinal Flora; was an honorary member, Pharmaceutical Society of Great Britain and of the Instituto Medico Nacional of Mexico. He was an expert in drug products in the Bureau of Chemistry, U. S. Department of Agriculture, 1907-1909 and pharmacognosist in the same bureau, 1912-1917.

Dr. Rusby was an author of merit; he wrote much on medicinal botany and contributed many hundreds of new species and genera; he introduced important drugs to American Materia Medica, among them cocillana, miré and caapi.

The Hanbury Medal, British Pharmaceutical Society, was awarded to Dr. Rusby in 1929; and he received the Flückiger Medal in 1938. He was also the recipient of the Remington Honor Medal in 1921.

Besides his wife, who was Miss Margaret Saunier Hanna before their marriage, he leaves three daughters, Mrs. Maximilian von Hoegen of Towaco, Mrs. William A. Couper of Courtland, N. Y., and Mrs. Kenneth D. Muir of Grand Rapids, Mich.; two brothers, George L. of Towaco and Joseph of Nutley, and a sister, Miss Elizabeth A., of Ocean Grove.

William M. Federmann

Wm. M. Federmann, veteran druggist of Kansas City, Mo., passed away on October 18th, aged 76. On his return from the N. A. R. D. convention in New York in September, he suffered a heart attack which was fatal.

In 1886, at the age of 22, Mr. Federmann stopped off in Kansas City, Mo., on his way to Los Angeles, Calif., and being attracted by the possibilities for success in Kansas City, he located there. He later owned a number of pharmacies but had disposed of all excepting one in the Professional Building, which he operated until his death.

Mr. Federmann was one of the original promoters of the United Drug Co. He was a member of the Kansas City Club, the Rotary Club, the Board of St. Luke's Hospital, a prominent member of the Episcopal Church, a life member of the Missouri Pharmaceutical Association, a director of the Kansas City College of Pharmacy and a past president of the Kansas City Retail Druggists' Association. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911. Mrs. Ruth O'Kane and a young granddaughter, of Kansas City, are the only direct survivors, Mrs. Federmann having died several years ago.

Kindly, generous and genial, Mr. Federmann commanded the respect of people in all walks of life. His counsel and advice were sought in every movement for the improvement of the profession of pharmacy and his death came as a shock to his many friends.

William H. Erhart

W. H. Erhart, of New York City, died at his summer home at Lawrence, L. I., on July 30th, in his 73rd year. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1911. Mr. Erhart was born in Brooklyn, N. Y. His father, with his uncle, Charles Pfizer, founded the House of Charles Pfizer & Co., in 1849. For more than fifty

years he had been associated with the company and was keenly interested in all connected therewith and was beloved by all.

He was a member of the Union, Racquet and Tennis, Rockaway Hunt, Piping Rock, City Mid-day, and Drug and Chemical Clubs. Funeral services were held on August 2nd, at the Church of the Heavenly Rest. Surviving are his wife Mrs. E. Henrietta Graves Erhart; a daughter, Mrs. Robert F. Six, of Denver, Colo.; and a son, C. Huntington Erhart, Spring Grove, S. Car.

Joseph C. Wirthman

Mr. J. C. Wirthman, of Kansas City, Mo., passed away at the age of seventy-four, on September 20th, after a year's illness.

He joined the AMERICAN PHARMACEUTICAL ASSOCIATION in 1911 and continued his membership until recently. In 1904, when the A. P. A. met in Kansas City, he served as Local Secretary. He was a life member of the Missouri State Pharmaceutical Association and a director in the Kansas City College of Pharmacy, since 1913. He belonged to the Native Sons.

Funeral services were held on Tuesday, October first, attended by members of the South Central Business Association, which he helped to found. Mrs. Rose Wirthman, his widow, survives.

George C. Decker

Mr. George C. Decker, of New York City, member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1919, died on October 16th, aged sixty-four years. Funeral services were held from Herrlich's Funeral Parlor, October 18th, at 8:00 o'clock. Mr. Decker was also a member of the New York Deutscher Apotheker-Verein since 1900 and the Society has lost a good friend and colleague. He will be missed by many.

Each Holiday Season throughout the years brought remembrances from Mr. Decker to the headquarters of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Carl Winter

Mr. Carl Winter of Cleveland, Ohio, passed away on October 24th. He was a member of the Board of Control of the Northern Ohio Druggists' Association, and editor of the *Northern Ohio Druggist*. The December issue of that publication will be dedicated to the memory of Mr. Winter.



This Christmas—be a partner in a great life-saving campaign. Use plenty of Christmas Seals on your letters and packages. They are gay, colorful . . . and what's more important . . . they spread a message of Tuberculosis control and prevention that is vital to the good health of us all! Since 1907, the annual sale of Christmas Seals has done its share in helping to reduce the death rate from Tuberculosis by 75%! Complete eradication is now in sight! But no one is safe from Tuberculosis until everyone is safe. So help yourself—by helping others!



The National Tuberculosis Association and its more than 1600 affiliated associations throughout the country have no other support than our dollars, which once a year we give—one by one, two by two, five by five—to a sum that enables the vast organization to wage its campaign for our health, happiness and lives.

Education, paid for by our Christmas Seal dollars is our greatest vaccine. Christmas Seals, too, have played a part in the establishment of clinics, in the development of new methods of diagnosis—the tuberculin test and the chest X-ray.

"Pay-Your-Doctor Week," inaugurated two years ago by California Bank in Los Angeles on a purely local basis, was observed this year from October 27th to November 2nd in scores of cities throughout the country with banks in the various communities sponsoring the movement.

AROUND THE STATES

ILLINOIS

Abbott Hall.—On the Chicago Campus of Northwestern University a modern residential skyscraper, made possible by a gift of more than \$1,500,000.00 from the estate of Clara A. Abbott, wife of Dr. W. C. Abbott, founder of Abbott Laboratories, was formally dedicated on October 20th. Dr. F. B. Snyder, president of Northwestern University, was chairman of ceremonies. A portrait of Dr. Abbott was unveiled by two of his grandchildren, Louise and Wallace Ford. The income from the building is to be used for chemical, medical and surgical research.

KANSAS

Hospital Pharmacy Training.—Dean J. A. Reese, Kansas University School of Pharmacy, has arranged with Dr. Wahl, dean of the School of Medicine, for the senior students to spend one week each semester in the hospital pharmacy at Bell Memorial in Kansas City. This will be a valuable experience for the students as each one will have the opportunity of spending two weeks during his senior year preparing hospital drugs and filling prescriptions under the supervision of a registered pharmacist for eight hours each day.

MARYLAND

Permit Denied.—The Maryland State Board of Pharmacy has refused the granting of a permit to any firm for the operation of a self-service pharmacy. The Board takes the position that the distribution of drugs and medicines is a professional function, and that the protection which the state pharmacy act was meant to give the public in the distribution of drugs and medicines cannot be afforded in the self-service type of drug store.

NEW JERSEY

Vitamin Decision.—The Board of Pharmacy of the State of New Jersey announces that there has been no change in the classification of vitamin products under the Pharmacy Act of this State. The Board has been advised by the Attorney-General, that the dismissal of the complaint filed by the Board of Pharmacy of the State of New Jersey against Quackenbush and Company, a department store of Paterson, New Jersey, involving the sale of "Vitamins Plus" without the supervision of a Registered Pharmacist, affects only this product. It has been erroneously reported in the press that Judge

Davidson of the Passaic County Court of Common Pleas has held that vitamins and vitamin products are foods and not drugs and that their sale is, therefore, not amenable to the Pharmacy Act.

The facts are that the only question for decision before Judge Davidson was whether or not the product "Vitamins Plus" is a drug or medicine within the meaning of the Pharmacy Act, and his decision in his own words reads as follows: "My conclusion is that 'Vitamins Plus' whether called an accessory food factor or a dietary supplement, is still essentially a food product and the complaint, therefore, should be dismissed."

Until the Supreme Court of the State of New Jersey has passed upon the appeal which the Board of Pharmacy is expected to file in this case, the decision cannot be considered final. It is anticipated that actions against other vitamin products will be prosecuted by the Board of Pharmacy of the State of New Jersey in the near future.

TEXAS

The State Pharmaceutical Association Merchandising Clinic was held on November 13th and 14th, in Waco, Mr. Chris Olsen being general chairman. An interesting program and entertainment features were enjoyed. The clinic was adopted as an experiment to ascertain the interest of Texas druggists and their employees in this type of program.

The University School of Pharmacy has enrolled a total of 268 students, sixty-eight of whom are new. Miss Etta Mae MacDonald, of Houston, who recently won the Fairchild Scholarship, is beginning her graduate work in bacteriology.

WISCONSIN

Medicine Bottle Labels.—A meeting of the Wisconsin Pharmaceutical Association including a "Symposium of Merchandising" was held at the Shroder Hotel, Milwaukee. Among the resolutions adopted by the convention was one urging the removal of the names of ailments from medicine bottle labels to discourage self-diagnosis by patients, and one asking that the excise tax on ethyl alcohol be lifted if it is used for medicinal purposes.

Clem A. Czerwinski was elected president; A. A. Hoehn, H. C. Druschke and Karl Henrich were elected vice-presidents; Jennings Murphy and B. F. Leidel were reelected secretary and treasurer, respectively.

It has been reported that Russian peppermint oil is again being shipped to the United States.

IN THE NEWS

Dr. Orlando Cattani of Santiago, Chile, was recently entertained by Dr. R. A. Lyman, dean of the School of Pharmacy, University of Nebraska. Dr. Cattani is vice-president of the National Pharmaceutical Association of Chile and chairman of the Social Security Board of that country. He is touring the United States, making a survey of our methods of handling the problems of social security as it relates to pharmacy. He stated that pharmacy in Chile has improved greatly in the last ten years and is on the road to even greater improvement. He expressed admiration of American methods and the belief that some of them will prove useful in the development of pharmacy in his country.

Dr. Perrin H. Long, professor of experimental medicine at Johns Hopkins University, Baltimore, Md., will be presented with the scientific award for 1940, of the American Pharmaceutical Manufacturers' Association at their midyear meeting in Washington on December 9th. The presentation will be made in recognition of his fundamental and outstanding contributions to, and leadership in, the study of the use of sulfanilamide, sulfapyridine and related pharmaceuticals in the treatment of disease.

John E. O'Brien, well-known Omaha pharmacist and chairman of the A. P. H. A. Committee on Pharmacy Work addressed the Creighton University College of Pharmacy student assembly recently on "National Pharmacy Week."

Charles R. Jordan has been appointed associate director of the newly organized Bureau of Professional Relations in the School of Pharmacy of the University of Florida. Mr. Jordan is a graduate of Purdue University and has had sales promotion experience with several large pharmaceutical houses.

Dean Hugh C. Muldoon, Duquesne University Pharmacy School, Pittsburgh, Pa., spoke on "Changing Trends in Professional Education," at the graduation exercises of Mercy Hospital School of Nursing.

Theodore Van Etten, Evanston, Ill., pharmacist, composed the college song of Northwestern University, "Go U Northwestern," and was lately given public recognition at a meeting of the Alumni. Mr. Van Etten who wrote both words and music plays a number of musical instruments,

including the saxophone, piano, cornet and trumpet.

Fred Elledge, of Salt Lake City, Utah, formerly owner of the Taylor Pharmacy, and a past-president of the Utah Pharmaceutical Association, was called to Washington recently to be inducted into the Federal Bureau of Investigation. Mr. Elledge is an attorney as well as a registered pharmacist.

Carl Durham, Chapel Hill, N. C., pharmacist, will return to Washington, D. C., for another two-year term in Congress, having recently been re-elected.

Mr. Roy B. Cook, of Charleston, W. Va., has donated to our historical collection a check for twenty cents, issued by the Mount Pleasant Apothecary Shop of Roxbury, Mass., January 1, 1803.

Pharmacists in Public Office.—Utah: William D. Wood, Ogden, representative; Grant Midgley, Sugarhouse, representative; Ed. Johnston, Sanpete County, senator. **West Virginia:** Fred Allen, Charleston, senator; G. O. Young, Buchanan, senator. **Wyoming:** A. H. Cordiner, Laramie, representative. **New Mexico:** Frank Butt, Albuquerque and Santa Fe, senator. **Oregon:** Fred L. Peterson, Portland, City Councilman. **New Hampshire:** George H. Duncan, Jaffrey, representative.

The American Institute of Pharmacy was visited by the following in November: I. M. Wise, New York City; W. E. Peake, Washington, D. C.; Mrs. M. G. Goldstein, Washington, D. C.; Mrs. John J. Troy, Washington, D. C.; Mrs. David L. Maxwell, Washington, D. C.; Mrs. John Ruddick, Washington, D. C.; Mr. and Mrs. F. C. Lewis, Metuckey, N. J.; James L. Porter, Burlingame, Calif.; Charlie Switzer, Hugo, Okla.; Frederick J. Rowe, Summit, N. J.; Rita S. Boyer, Seat Pleasant, Md.; Trissa B. Hemminger, Arlington, Va.; Charlotte M. Shaffer, Washington, D. C.; Robert Altschuler, Flushing, N. Y.; James J. McKeever, Washington, D. C.; John W. Courtney, Jr., Washington, D. C.; G. H. Wilson, Washington, D. C.; Mr. and Mrs. Herman Doetofsky, Perth Amboy, N. J.; Edward Stepien, Massena, N. Y.; K. M. Kustetter, Harrisburg, Pa.; Paul W. Sutton, Camp Hill, Pa.; Everett J. Gorman, Hackensack, N. J.; Robert A. Wise, Camp Hill, Pa.; Helen McDonald, Washington, D. C.; Thomas V. McKeever, Washington, D. C.

EDITORIAL

Some Vanishing Symbols of a Living Art

The elaborately decorated chemical containers, jars, oldfashioned mortars and pestles and other obsolete utensils depicted in the photograph of a corner of the museum of the AMERICAN PHARMACEUTICAL ASSOCIATION shown on the front cover of this issue of the *Journal* are vanishing symbols of the more or less ancient pharmacy. The fact that containers and utensils of this sort have been replaced by more modern bottles, labels and utensils is often taken as an indication of the demise of the art of the apothecary. Careless observers and, only too frequently, the writers of popular articles for newspaper and magazine consumption, love to dwell on the contrast between what they picture as a once perfect and greatly admired art and the less romantic dispensing of ready-made drug products. These sophisticated critics of the modern pharmacy fail entirely to take into consideration that, regardless of the time and place, the actual practice of the pharmaceutical art is still largely in the hands of individuals who have been carefully trained in the foundations upon which the art of pharmacy is built. Regardless of the dosage form which is dispensed by the apothecary and regardless of the method or place of production of the drug that has been prescribed, it is still the trained mind and often the skilled hand of the pharmacist which produces the end product that may hold life in the balance.

Considering the tremendous multiplication of specialty drugs, the individual desires of physicians and the peculiarities and idiosyncrasies of patients, it takes a rather nimble mind to keep abreast of the fast moving cycle of modern therapy. It is fortunate that the remedies of the day can be produced

and dispensed with the aid of machinery. The preparation of a hundred cathartic pills in the days so often longed for by writers who can find nothing good in the modern pharmacy was a mere trifle as compared with the production of a carefully assayed and standardized dose of some hormone or active drug principle. The modern pharmacist, regardless of where he practices his profession, is trained in the basic sciences and in the arts which make the production of such modern drugs possible. Just because stone mortars and beautifully decorated jars or cumbersome balances and odd-shaped measuring glasses are no longer employed in the drug store, we read lamentations of the passing of the art of pill making by means of crude equipment.

Titles for articles in popular magazines, such as "Pharmacy—A Vanishing Profession?" attract attention but when one reads what is said under the title it is rarely anything but praise for the progress which has been made. It seems unfortunate that our friends in the medical profession feel that it is necessary to use such titles to attract attention to a sister profession when they must know that even though the subject matter of the article is complimentary, there is a certain sting in the title.

The art of the apothecary still lives in the hearts and minds of those who devote their time and energies to the practice of this profession in the public interest. If they have been superseded to a considerable extent by the dispensing doctor and the self-medicating patient who is a direct product of the dispensing doctor, that is hardly a fault which can be laid at the door of the pharmacist. The symbols of the pharmaceutical art

depicted in works of history and in our museums may be no longer visible in the modern drug store but the fact that they have vanished is no indication whatsoever of the death of the art which they once symbolized. There are new symbols of this art. They are the neat, clean and practical containers of drugs, the modernized utensils and the space-saving and streamlined equipment which save footwork so that headwork may be more readily exercised. But the most important indication that although certain symbols may have departed, the art which they portrayed in days gone by is still very much alive, may be found in the professional literature of pharmacy, in its educational program and institutions, in its strict regulatory requirements, in the sound ethical

concepts which motivate the pharmacist who practices his profession *secundum artem* and in its charitable interpretation of the shortcomings of other professions. Let us hope that the "big brother" of pharmacy may soon learn to understand that he cannot benefit our profession by casting the type of reflection against us which has so flagrantly been cast against him by sections of the public and even by the Government. Medicine has been on the defensive for some time and pharmacy has been one of its most loyal supporters. If pharmacy vanishes from the scene it will be due in a large measure to that segment of medical practitioners whose selfishness and lack of vision have combined to destroy where they could have built.

A. Ph. A. Council Meeting

Important actions affecting many of the activities of the A. Ph. A. were taken at the semi-annual meeting of the Council held in the Headquarters Building in Washington, D. C., December 12 and 13, 1940. Foremost among the subjects engaging the attention of Council members was the publication of its journals and the National Formulary. It was decided to engage the services of Mr. Robert W. Rodinau as full-time editor of the Practical Pharmacy Edition of the JOURNAL OF THE A. PH. A. The Publication Committee was designated to act as an editorial board for This Journal.

National Formulary

A lengthy discussion followed the presentation of the report of the Chairman of the N. F. Committee supplemented by the report of the Committee on N. F. and Recipe Book Policies and the report of the Chairman of the Committee on Publication.

Careful consideration was given by the Council to the necessity of clarifying the relations between the U. S. P. and the N. F. with respect to scope and content of these two official books of drug standards. It was felt that the need for a plan of cooperative action between the Trustees of the U. S. P. Convention and the Council of the A. Ph. A. in determining publication policies

of the two books had arisen and it was therefore decided to request a conference with the Board of Trustees to consider the situation.

A committee of five members, with Chairman Powers of the National Formulary Committee, was appointed to represent the Council in such a conference. The members of the committee include Messrs. R. P. Fischelis, A. G. DuMez, H. H. Schaefer, C. B. Jordan and C. H. Evans. This committee was instructed by the Council to prepare resolutions covering the attitude of the Council in the matter of transfer of items from one official book of standards to another. Such a statement was later drawn up and approved by the Council as a basis for discussion in the proposed conference with the U. S. P. Board of Trustees.

Secretary Kelly was instructed to inform the Board of Trustees of the U. S. P. Revision Convention that the manuscript of the N. F. VII is in the hands of the printer and that it is hoped to go forward with its publication on or about January 1, 1941, with the view to having the book appear by July 1, 1941, and to become official on January 1, 1942.

Dr. H. B. Haag was elected a member of the N. F. Committee to succeed the late Dr. Fantus as Chairman of the Subcommittee on Pharmacology and Posology.

President Evans' Recommendations

President Evans addressed the Council on his recommendations for improvement of the activities of the ASSOCIATION as outlined in his installation message at the Richmond meeting. Reference to these recommendations and actions thereon is made in a message from President Evans in this issue of the Journal. He called the attention of the Council to the contacts he had made in various sections of the country as President of the ASSOCIATION and as a result of his recommendations definite action was taken on the program for the Detroit meeting next August. He also commented at some length on the necessity for a more active membership campaign and the desirability of active representation of the A. PH. A. at meetings of state pharmaceutical associations. As a result of Mr. Evans' suggestions it was decided to recommend to the various state pharmaceutical associations the inclusion on their convention program of an address on Pharmacy and National Defense Activities, to be given by members of the Council who may be available for this service.

Finances

Very careful and lengthy consideration was given to the reports of the Committee on Property and Funds and the Committee on Finance, in which several recommendations were made with respect to the combination of a number of accounts, the preparation of budgets and itemized statements of assets and liabilities and more frequent and complete audits of the ASSOCIATION's funds.

Retirement Provisions

Chairman Holton of the Committee on Tenure of Office and Retirement Fund reported that the ASSOCIATION was not in a position at this time to establish a permanent retirement fund for its employees. Group insurance plans had been investigated but it was not considered feasible to recommend any definite action at this time since the ASSOCIATION's finances do not permit of setting aside any considerable sum for retirement purposes. The committee was continued.

Affiliated Organizations

A set of general principles governing the affiliation of organizations with objectives similar to the A. PH. A. was approved and the American

College of Apothecaries was granted the privilege of becoming an affiliated organization following a conference with the officers of that group who appeared before the Council and agreed to the principles which had been read to them.

Mercer Apothecary Shop

A complete report of the status of the Mercer Apothecary Shop located at Fredericksburg, Va., prepared by Chairman Richard Deno, was read by Secretary Kelly. It was decided to set up the type of organization recommended by Dr. Deno and the thanks of the Council was extended to him and his associates for bringing this matter to a successful consummation.

Student Branches

Chairman Ernest Little of the Committee on Local and Student Branches recommended that the annual dues for students in colleges of pharmacy where student branches have not been established be also reduced to \$3.00, the dues to be collected by the colleges. This recommendation was referred to the Committee on Constitution and By-laws with the recommendation that appropriate action be taken to carry out this proposal.

Aiding British Pharmacists

Consideration was given by the Council to a request from the Pharmaceutical Society of Great Britain for aid to British pharmacists who find themselves in distress through war conditions. The Council expressed its full sympathy with such an undertaking and authorized the use of the name of the A. PH. A. in the solicitation of funds for this purpose. Secretary Kelly reported that a number of subscriptions had already reached his office.

Pharmacy and the National Defense

Secretary Kelly reported on the activities of the A. PH. A. in connection with the National Defense Program and on the proposal that a Subcommittee on Pharmacy of the National Defense Council's Committee on Health and Welfare be appointed. It was decided to appoint a Committee on National Defense and Preparedness consisting of seven members to assist in the program of national defense. Chairman Jenkins appointed the following committee: E. F. Kelly, *chairman*, C. H. Evans, J. L. Powers, R. P. Fischelis, W. H. Whittlesey, A. G.

DuMez and R. B. Cook. This committee was directed to prepare and issue a statement of the importance of pharmacy in community life and the hazards to the public health and welfare if pharmaceutical service is curtailed. The committee was further instructed to prepare this

statement with the purpose in mind of affording information to local draft boards who are faced with the problem of dealing with induction of pharmacists into the selective service.

All sessions of the Council were presided over by Chairman Glenn L. Jenkins.

A Message from President Evans

THE mid-winter meeting of the Council has just been held. Along with the regular business, considerable time was devoted to the objectives as set forth in my installation address at Richmond. They are as follows:

(1) That the Council make it possible for a contact man and committee of pharmacists in whom these retailers have explicit confidence, together with officers of the ASSOCIATION, to meet with every state and local association possible in the interest of selling the A. P. A. to retail pharmacy.

(2) That each College of Pharmacy and Student Branch be visited and that a year's membership be given to its graduates who will subscribe to the principles as outlined in the Code of Ethics. Furnishing our JOURNALS to each student, thereby, while in a formative period, acquainting young pharmacists with association activities and keeping them abreast of the times. Thus rendering a service to Colleges of Pharmacy.

(3) That a joint State, A. P. A. and N. A. R. D membership be worked out along lines similar to the American Medical Association, thereby giving pharmacy a unified front, a commanding voice and a representative membership.

(4) That a framed Code of Ethics be presented without cost to each new member to acquaint him with the objectives of the ASSOCIATION and to lend a professional air to his store.

(5) That the new Practical Pharmacy Edition of the JOURNAL be made more in keeping with the needs of retail pharmacy. This Journal with the help of the A. P. A. laboratory personnel can work out a uniform and helpful U. S. P. and N. F. Program tying in with similar state association work.

(6) That the new Journal furnish material to state association secretaries for bulletin service; this material to include educational, legislative and commercial matters in the interest of a coordinated program of state and national import.

(7) That the new Journal launch a nation-wide program of publicity through this state association set-up, through the daily press, magazines and periodicals, and in every available source, on scien-

tific, educational, legislative and news matters relative to all phases of pharmacy and pharmacists in public life. For example; a complete coverage of the coming U. S. Pharmacopœial convention.

(8) That a Pharmaceutical Alliance composed of representatives of all branches of the drug industry be formed to coordinate efforts in all matters affecting the unit of pharmacy. I see no reason for additional associations. The need is for some one group to speak for a unified profession and to direct its destinies.

The Council realizes full well the importance of these additional services needed to bring about a stimulation of professional pride that will help to dignify Pharmacy in the eyes of the public. The Council made plans to put some of these services into practice now. Others were delayed due to the lack of necessary funds to properly finance them. The solution to this problem seems to rest in one word—"membership." With an increased membership it will be possible for the A. P. A. to speak authoritatively for every pharmacist in our nation, and not only speak for pharmacy but to actually *do* things in keeping with the highest traditions of the profession.

Beginning January first we will have a full-time editor of the Practical Pharmacy Edition of the JOURNAL. This Edition during 1941 as in the past year will be sent absolutely free of cost to every dues-paid member of an affiliated state pharmaceutical association. May I request that you coöperate with the editor in making this the most welcomed publication in the field.

The A. P. A. will be officially represented at every state pharmaceutical association during 1941. Here again the message of pharmacy, direct from the Headquarters Building in Washington, THE AMERICAN INSTITUTE OF PHARMACY, presenting professional pharmacy and the pharmacist's part in our national defense pro-

gram, will be carried to all sections of the country by the personal appearance of an officer or member of the council.

Additional services will be rendered state association secretaries in materials furnished for bulletin service in matters relating to professional activities, U. S. P. and N. F. promotion program, interprofessional relations, "George-Deen" educational program and in other services designed to be helpful in promoting closer coöperation among all branches of the profession.

These services and others are possible with an increased membership. May I urge each member of the ASSOCIATION to act as a committee of one during the month of January sending in as many applications for membership in the AMERICAN PHARMACEUTICAL ASSOCIATION as possible.

CHARLES H. EVANS, *President*

Problems and Plans

MILITARY OR ECONOMIC WAR faces the United States of America and the repercussions of such a war will be felt in every walk of life. Pharmacy will be affected by world affairs to the same extent that every other professional, lay or business group is apt to be. It behooves us, therefore, to keep well abreast of world affairs and to pay particular attention to the developments in federal and state governmental circles arising from the activities of the Government in meeting defense and economic situations. The Federal Government, as well as the governments of the several states, is engaged in studies that reach beyond the need for national defense or actual military war. The eyes of alert governmental officials are fixed upon the time when military hostilities will cease and the contest for economic supremacy will become more intense. Pharmaceutical organizations will do well to engage in long term planning to the extent that this is possible under present conditions. A most important move in this direction is the strengthening of the bond between local, county and state pharmaceutical organizations and between state and national organi-

zations and, finally, between the national organizations of the various branches of the profession and the drug trade.

NATIONAL SOCIAL HYGIENE DAY will be observed for the fifth consecutive year on February 5, 1941. This annual observance is intended to swing Americans into line for a round-up to meet the stirring challenge in the campaign against venereal diseases and the long range social hygiene program. This year National Social Hygiene Day includes an additional activity because of the nation's plans for defense. "We must help guard our soldiers, our sailors and our workers who build and service defense equipment from the gravest danger which threatens their health and strength—from the crippling, man-wasting assaults of syphilis and gonorrhea." The pharmacist's part in this activity is twofold. As a loyal citizen he must help in formulating programs in his own community and contribute of his time and funds and facilities for educational propaganda to the greatest possible extent. As a professional man his duty lies in the direction of assuring to men in the service and those who are engaged in defense efforts the best preventive and curative measures available. To this end he must subordinate his business welfare to the welfare of those who may be or have been exposed. The information he gives with respect to sources of prevention and adequate treatment must be accurate and solely in the interest of those seeking adequate information. Lists of venereal disease clinics, competent members of the medical profession and other information which will lead those seeking assistance into ethical and effective channels for treatment should be readily available. Every pharmacist should keep in active touch with the local representatives of the American Social Hygiene Association, health departments and others who are in a position to supply adequate information on new developments in this field, especially in the community where the pharmacist carries on his professional activity.

Some Additional Comments on Collyria*

By MADELINE OXFORD HOLLAND, D.Sc.†

Modern pharmaceutical practice requires the application of the principles of chemistry and bacteriology to the compounding of many prescriptions. Here the author reviews the methods of preparing isotonic and sterile collyria and offers practical suggestions for their improvement.

SOME time ago, prompted by the growing interest among pharmacists in the more adequate preparation of medicinal solutions for the treatment of the eye, the writer was prompted to devote some consideration to the problem of "collyria," or "eye solutions." (1) - Coincidentally, as the result of certain valuable contributions to ophthalmic practice by Feldman, (2) Gifford (3) and others, there had arisen on the part of progressive and thoughtful practitioners a demand for solutions for the eye, properly balanced, buffered and rendered in each instance specifically isotonic with the lachrymal secretions. The studies by the writer have been published.

The practice on the part of physicians to prescribe specific medication prepared and dispensed in accordance with the newer methods of practice has gradually increased. Pharmacists in retail professional practice and in the hospital pharmacies have found it necessary to carefully study the principles involved. In addition, certain new techniques have been introduced, which place the pharmacist in the position of assuming added responsibilities.

It is a medically accepted fact that collyria, when properly buffered and rendered isotonic, have an added and improved therapeutic effect. To the physician, the problem is essentially a simple one. When desiring such an improved preparation, the prescriber merely states the desired medication, and adds "Misce et fiat buffered and/or isotonic collyria." The rest remains the province and the problem of the pharmacist. It is not my purpose to give detailed discussion of the methods of producing isotonicity and buffering, sterilization or preservation. They have been adequately discussed before.

Since the publication of these papers, some newer details have appeared and deserve incorporation into the literature on the subject.

* Presented before Subsection Hospital Pharmacy, A. PH. A., Richmond, Va., May 9, 1940.

† Philadelphia College of Pharmacy and Science.

Considerable confusion has arisen in the minds of many pharmacists concerning the exact status and method of procedure in connection with the buffering of collyria. Gifford, the basic authority on the subject, presented the method employing especially prepared "acid buffer" and "alkaline buffer" solutions, which were to be admixed in measured proportions to obtain desired hydrogen ion concentration (or p_H) levels. The original work by the authority presented an "Acid Buffer Solution Basic" with the following formula:

Boric acid, powdered	12.4 Gm.
Potassium chloride, anhydrous	7.4
Distilled water	1000.0

This basic acid buffer solution showed a p_H value of 5.0, and this extreme of acidity is modified to suit the individual medicament or therapeutic need by the addition of the "Basic Alkaline Solution" prepared by his original formula. Gifford has presented, and others have made additional contributions to it, a chart of the amounts sufficient to provide various p_H values.

In a recent work, Gifford modified the original formula for the basic acid solution and reduced the quantity of boric acid, giving the amended formula as:

Boric acid	6.2 Gm.
Potassium chloride anhydrous	7.4
Distilled water	1000.0

This reduction in the formula changed the boric acid content by one-half. The decrease in acid content produces a rise in p_H value toward the neutrality point, and the p_H of this revised formula is about 5.5.

It is the appearance of these two formulas in the literature that has caused some confusion. Because of greater ease in calculating, and because most of the published work has been done with the original formula, this writer suggests that pharmacists continue to employ the original boric acid content. Inasmuch as the method of

buffering is at the discretion of the pharmacist, the actual formulas chosen and the proportions used make no difference provided that the final solution is brought to the desired level of ion concentration.

A convenient key for comparison of these formulas, to obtain, let us say, a solution with desired p_H of 7.6 would be:

Gms. of Boric Acid in Formula of Basic Acid Solution	p_H of Basic Acid Solution	Cc. of Basic Acid Solution Used	Cc. of Basic Alkaline Solution Used	p_H of Final Solution
6.2	5.5	50.0	1.0	7.6
12.4	5.0	50.0	2.5	7.6

Another writer has suggested that the sodium carbonate in the basic alkaline solution be replaced by sodium bicarbonate, in equal amount.

Preservation of collyria is a problem which has aroused added interest in recent months. The increasing number of newer preservatives which have been placed upon the market has in some measure solved this difficulty. An organic synthetic which is extremely effective in preventing mold growth in ophthalmic solutions is *n*-butyl parahydroxybenzoate, marketed by a pharmaceutical chemical house as "butoben." The customary quantity of ten grams of benzoic acid may be supplanted by but one gram of this ester. It is especially useful with camphor water in eye solutions, one grain of the substance rendering forty fluidounces of the collyria free from mold growth. It is incompatible with zinc salts, however. It is physiologically inert.

Gershenfeld (4) in a recent survey of preservatives in ophthalmic solutions, stated that:

Chlorobutanol—0.5 per cent showed bactericidal power after 144 hours.

Chlorthymol—0.01 per cent showed bactericidal power after 144 hours.

Merthiolate—0.01 per cent showed bactericidal power after 144 hours.

Phenylmercuric acetate—0.002 per cent showed bactericidal power after 144 hours.

Phenylmercuric nitrate—0.002 per cent showed bactericidal power after 144 hours.

Sodium ethylhydroxybenzoate—0.05 per cent showed bactericidal power after 480 hours.

Sodium propylhydroxybenzoate—0.05 per cent showed bactericidal power after 480 hours.

Sodium benzoate—0.5 per cent showed bactericidal power after 480 hours.

n-Butylparahydroxybenzoate—0.02 per cent showed bactericidal power after 480 hours.

Oxyquinoline sulfate—0.05 per cent showed bactericidal power after 480 hours.

Mercuraphen (precipitates)—0.01 per cent showed bactericidal power after 480 hours.

Collargolum—0.1 per cent showed bactericidal power after 840 hours.

Sodium methylhydroxybenzoate—0.15 per cent showed bactericidal power after 840 hours.

Sodium benzoate—0.1 per cent showed bactericidal power after 840 hours.

Acriflavine—0.01 per cent showed bactericidal power after 840 hours.

Synthetic camphor—0.1 per cent showed bactericidal power after 840 hours.

Phenylhydroxy mercuric chloride—sat. sol. showed bactericidal power after 840 hours.

Copper sulfate—0.01 per cent showed bactericidal power after 840 hours.

Two pieces of apparatus have recently been developed for filtration and sterilization of small quantities (3i-3ii), and which are adaptable to use with extemporaneously prepared ophthalmic prescriptions. The first of these is the Swinny filter adapter which is a modified small-scale model of the Seitz filter. It consists of two small metal parts, one of which screws into the other, holding a washer, filter pad and wire gauze between them. One end of the filter is prepared to fit (slip over) the end of an hypodermic needle. The filter may be sterilized in one piece in the autoclave and the syringe and needle in a hot-air oven. The solution is drawn into the syringe, the filter and needle attached and the liquid forced through the filter into the vial. This piece of apparatus requires a great deal of pressure, and also retains a considerable quantity of liquid on the pad. It is not absolutely necessary to sterilize the syringe, although this is advisable to prevent added contamination.

The second apparatus is termed a microbacteriological filter unit, and similar in structure to the above except that it is adapted for suction filtration rather than for the syringe pressure, and also by being of larger capacity. It is also composed of two metallic parts which fit as before, holding between them a fine screen, a filter paper disk, a filter pad and a perforated washer. This is inserted in a large rubber stopper which also carries a suction outlet. The liquid runs through the filter into a homeo vial attached by means of a small rubber stopper. A larger cylinder on the outside provides the space for vacuum and is connected with the suction outlet in the larger rubber stopper holding the filter. The

entire apparatus may be sterilized in the autoclave as a single unit. This is a very convenient mechanism for filtering and sterilizing small quantities of "eye drops" as a prescription, since the vial is sterilized at the same time as the apparatus.

For sterilization and filtration of larger quantities of ophthalmic solutions, the procedures outlined previously may be employed. Apparatus which operates in this fashion may be constructed by the pharmacist from materials at hand, after the Seitz-type filter is obtained.

These few additional comments have been presented because of the growing interest shown by physicians and pharmacists in the proper preparation of ophthalmic solutions. These procedures may be applied to the dispensing of washes and

lotions by the hospital or prescription pharmacist. They are indicative of the developing techniques of pharmacy and give ample evidence of the increasing complexity of pharmaceutical practice and the growing dependence of the physician upon the alert pharmacist.

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Liquor Aromaticus Alkalinus N. F.

By EDWARD C. WATTS

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The unsuitability of Tr. Cudbear N. F. as a coloring agent is discussed and Solution of Amaranth N. F. is suggested in its place.

THE National Formulary describes Alkaline Aromatic Solution as "a clear bright red liquid, with an aromatic odor and taste." Objection may be taken to this description in that red does not seem to accurately describe the color of the preparation as it reaches the consumer. The word lavender would appear to be more nearly accurate as a descriptive term, especially when applied to small lots of the freshly made solution. The present National Formulary description, if applied to a sample of Alkaline Aromatic Solution N. F., which has stood on an open shelf, at ordinary room temperature, for a period of from two to six months, is not at all accurate, as will be seen from the following notes.

Attention was first called to this product because of the discoloration resulting when the preparation was bottled in 125- and 250-cc. prescription bottles and allowed to stand on an open laboratory shelf in advance of dispensing. This shelf is about seven feet above the floor and directly opposite a pendant ceiling light with an opalescent globe. It was found that bottles of

Alkaline Aromatic Solution N. F. which were placed on this shelf would, in a comparatively short time, lose their original color, brightness and clearness and actually become turbid in appearance.

To determine whether or not the official formula, which includes Tincture of Cudbear N. F. as the coloring agent, was at fault, a sample lot was prepared, subdivided and subjected to various conditions of exposure to light and temperature, as indicated in the following table. Four samples of 125 cc. each, in standard screw-capped prescription bottles, were used. All could be described originally as samples of a clear, bright, lavender liquid. On standing, under the conditions indicated, there were changes in accordance with the following notes:

	At End of Two Months	At End of Four Months
Sample No. 1: Kept in dark refrigerator	Clear, bright and sparkling as original	No change

	At End of Two Months	At End of Four Months
Sample No. 2: Kept at room tempera- ture and dark	Still a good color but slightly faded	Slightly faded and indica- tion of tur- bidity
Sample No. 3: Kept at room tempera- ture and ordinary light	More faded than No. 2. Now rather pink and turbid	Fading and turbidity in- creased slightly
Sample No. 4: Kept on win- dow ledge inside lab- oratory	More faded than No. 3 and turbid- ity increased	Fading and turbidity in- creased

It should be stated that these observations were made during the period from September 1st to December 1st, so that Sample No. 4, which was exposed on the window ledge, did not undergo as much exposure to direct sunlight as it might have, had it been exposed over a longer or a different period of time. Other samples exposed for an undetermined period of time, in the originally described shelf location, can only be described as practically devoid of color and quite turbid.

To remedy this unsatisfactory condition, it was determined that Solution of Amaranth, now official in the National Formulary, could be used as a coloring agent for Alkaline Aromatic Solution N. F. It was used in the same concentration as is Tincture of Cudbear N. F. in the present official formula. The resulting product was a clear, sparkling, red solution which, when subjected to exactly the same conditions of exposure to light and temperature, as were the samples of the official preparation, proved to be entirely stable and free from fading. In addition there was no development of turbidity.

Alkaline Aromatic Solution colored with Solution of Amaranth N. F., in the proportion in which Tincture of Cudbear N. F. is used, is of a deep red color. In some instances this color may be considered too intense for complete satisfaction. To obtain a shade of color of somewhat the same intensity as that imparted by Tincture of Cudbear N. F. it will be necessary to reduce the amount of Solution of Amaranth N. F. to approximately 25% of the amount specified for Tincture of Cudbear N. F.

Conclusions

1. The National Formulary description of Alkaline Aromatic Solution is not a true de-

scription of the color of the product as it reaches the consumer.

2. The present National Formulary formula for Alkaline Aromatic Solution is unsatisfactory in that the coloring agent used is unstable, when the solution, in which it is used, is subjected to ordinary conditions of storage.

3. Solution of Amaranth N. F. when used to color Alkaline Aromatic Solution yields a product which has a pleasing, stable color.

4. It is suggested that 5.0 cc. of Solution of Amaranth N. F. be substituted for 20.0 cc. of Tincture of Cudbear N. F. which is now used in the official formula for Alkaline Aromatic Solution N. F.

Cement for Pipe Leaks

A modified glycerine-litharge cement that is water-proof, resistant to fairly high temperatures and that sets under water may be used to repair leaks in pipes. To prepare this compound for use, equal parts of cement and litharge are thoroughly mixed together and then a volume of glycerine equal to half the volume of the mixed powders is added and the whole thoroughly mixed with a spatula or similar flat-blade tool.

When repairing a leaky pipe, the hole is filled with the cement and bound in place with cheesecloth, then a quantity of the cement is daubed on the cloth wrapping and the whole is tightly bound with iron wire.

Although the powders may be mixed ready for use, the glycerine should be added only when the cement is needed for immediate use.

Another Use for Glycerine

Here is a hint from a former bank teller which should be useful to cashiers in making up the payroll and elsewhere. When handling money, the teller reports, he always used glycerine to wet the sponge which he used to moisten his fingers. He also followed the practice of rubbing a coating of glycerine over his hands before starting work, as he found that at the end of a busy day it was much easier to remove the grime from his hands.

A species of soil bacteria discovered on the campus of the University of Wisconsin is proving useful in the development of industry in Puerto Rico. The organism was discovered by Prof. Elizabeth McCoy, University of Wisconsin. This germ converts molasses into butyl alcohol, much in demand commercially, especially in the paint industry.—*Science News Letter*.

Professional Relations

By C. B. JORDAN

Chairman, Committee on Professional Relations of the A. Ph. A.

One of the objectives set forth by the founders of the A. Ph. A. in 1851 was the fostering of improved professional relations. Dean Jordan's Committee is engaged in this activity. Information from Indiana, Iowa, Ohio, Michigan, Maryland, New York, West Virginia, Wisconsin is here set forth.

LAST year your committee submitted four reports, stating how professional relations are being carried on by the several state pharmaceutical associations. These reports were submitted in the hope that each state committee would receive some new ideas regarding professional relations programs from the experiences of the other state committees. It has now been suggested that your committee outline a process for "beginning" and "carrying through" a professional relations program. Your committee believes that the best method of accomplishing this is to give several methods that have been followed successfully by state committees and *this* report will be concerned with "starting" such a program. These are the methods used:

How Indiana Started

Mr. C. E. Nelson, in his address as president of the Indiana Pharmaceutical Association in 1929-1930, reported as follows:

"For many years we have dreamed of a closer cooperation between medicine and pharmacy. Last year, you will recall, Dr. B. D. Myers, dean of Indiana University School of Medicine at Bloomington, was the principal speaker at our banquet. This year your president got into communication with the executive secretary of the Indiana Medical Association at Indianapolis. A conference was held with him and his associates. I was received most cordially and an invitation was extended to send a representative to our convention.

"Dr. Charles P. Emerson, dean of Indiana University School of Medicine at Indianapolis, will address this convention to-morrow morning as a representative of the State Medical Association.

The Indiana Pharmaceutical Association has been invited to make an exhibit of the U. S. P. and N. F. preparations at the State Medical Association's convention at Fort Wayne in September and I recommend that the association accept this invitation and ask the Purdue University School of Pharmacy to prepare and plan this exhibit at the expense of the Indiana Pharmaceutical Association."

As a result of President Nelson's recommendation a Professional Contact Committee was appointed with Mr. Nelson as chairman. Later the name of the committee was changed to Professional Relations Committee. This committee has functioned continually since its organization and later a report of its activities will be given.

Iowa Forms Inter-Professional Group

Dean R. A. Kuever, a member of the A. Ph. A. Committee on Professional Relations, submits a very fine report on the organization of the Iowa Inter-professional Association. This organization had its inception in the minds of Mr. George Judisch, a pharmacist of Ames, and Dr. Robert L. Parker of Des Moines. The Iowa Inter-professional Association was organized in 1936 and its constitution sets forth seven main objectives, briefly as follows:

- A. To provide a clearing house for interchange of information.
- B. To act as a bureau of research.
- C. To educate the public regarding the profession.
- D. To cooperate in legal and ethical standards.
- E. To cooperate in the enforcement of professional laws.
- F. To cooperate in promoting the advancement of member professions.
- G. To promote the organization of county and district federations.

In about two-thirds of the ninety-nine counties of the state, county units have been formed and in a few districts units consisting of one or more counties that make up congressional districts are also formed. Naturally, in some localities there has been more activity than in others due to the fact that interested individuals have taken an active part.

Each association of the several professions appoints delegates to the Iowa Inter-professional Association and the officers of the Association are selected from the delegates. Thus far the programs have been quite general in nature, presenting ideas for the promotion of the welfare of the several professions.

In addition to the above, the Iowa Pharmaceutical Association has arranged a display at the annual meeting of the Iowa Medical Association. These displays have created a great deal of interest and each year they have taken a special theme. At the recent convention of the Medical Society the primary thought of the display was the responsibility of the physician to the new label laws.

The situation in Iowa is similar to that of the other states in that someone who is particularly interested in the work has to take the responsibility and give force to the program. Mr. George McChane, Mr. Charles Falkenhiner, Mr. Walter F. Meads and Mr. L. L. Eisehrout have, among others, given thought and effort to the program.

Cleveland Academy of Pharmacy

Although this group does not represent all the pharmacists of Ohio, the success of the group in building up greater professional understanding and more cordial relationships between pharmacy and medicine merits discussion here. It would seem to the Chairman of your Committee that what has been successfully done in Cleveland should be an incentive for the organization of similar professional groups in all large cities. Professor N. T. Chamberlin of Western Reserve University, School of Pharmacy has kindly submitted a report of the organization of the Academy. He writes as follows:

"When our Academy of Pharmacy was organized in 1932, provision was made for a standing committee on relations with the Cleveland Academy of Medicine. This committee asked the Academy of Medicine to appoint a committee to meet with it for the purpose of formulating PRINCIPLES OF COÖPERATION between the two academies. The following statement resulted:

Principles of Cooperation

A. The welfare of the public requires a close cooperation between an intelligent, well-trained medical profession and a pharmaceutical profession equally intelligent and equally well trained in its special field.

B. Personal contact between the physician and the pharmacist is essential in securing and maintaining this cooperation.

C. The relationship between these two groups is not stationary but will require a continuous modification and elaboration of concepts and principles with changing conditions.

Concepts

Following are the concepts upon which the above principles are based:

1. The public is entitled to the best possible medical care.

2. Such medical care postulates not alone competent doctors but accurate and ethical pharmaceutical service.

3. The natural corollary is that these two are mutually interdependent.

4. The mutual understanding of the Codes of Conduct of the two groups obviously will facilitate the service each can render to the other.

5. The establishment of an understanding acquaintance between the pharmacist and the physician who practices in his district is essential for intelligent cooperation.

6. The maintenance of this understanding once established depends upon the ability of the pharmacist to meet his obligation as a scientifically trained person.

7. This understanding acquaintance is based upon personal contact not only in the pharmacy but in the office of the physician as well.

8. Under these circumstances the discussion of mutual problems is facilitated and the obligation of the pharmacist to make available to the doctor information of the progress of pharmacy can be best met.

9. Furthermore the public is entitled to the best and most accurate professional pharmaceutical service at the lowest cost consistent with a reasonable profit to the pharmacist for this service.

10. Such a service cannot be furnished to the public through the use of proprietary medicines of known or unknown formulas since they are not designed for this purpose.

11. The use of proprietaries by doctors either by prescriptions, sample or word of mouth tends to favor self-medication with its attendant dangers to the patient.

12. It is the obligation of the medical men to be familiar with the action of drugs and prescription writing so that he will not have to take advantage of formulas suggested by proprietary medicine manufacturers or by their detail men.

13. The pharmacist by virtue of the accuracy of his information should supplant the detail men.

14. The discussion of details of the mechanics of pharmacy will naturally follow the establishment of this cooperation between physician and pharmacist.

By mechanics we mean counter prescribing, office dispensing, methods of handling prescribed proprietaries, cost of extra services aside from cost of materials and true pharmaceutical service and similar details affecting the working relationship between physician and pharmacist.

"You know, I believe, that we forward bulletins only to members on the roster of the medical association—in fact, their clerk runs our envelopes through the association's addressograph machine. When any of our members request it, we send bulletins to non-members of the medical association."

Maryland's Effective Program

The committee charged with developing and improving professional relations is known as "U. S. P. and N. F. Publicity Committee of the Maryland Pharmaceutical Association and Baltimore Retail Druggists Association" and its very efficient chairman is Marvin J. Andrews, whose reports on professional relations have appeared in several issues of the JOURNAL OF THE A. PH. A. Mr. Andrews tells of early activities as follows:

"Eight years ago when I was appointed chairman, the Association failed to provide any funds. A program was outlined and the committee endeavored to collect a dollar from each store in Maryland. This was accomplished by letters and personal contacts. The second and third years a committee was appointed to raise this money. The fourth year the activity was carried on by personal contributions after which the Association donated funds. These funds along with the money obtained from the sale of boxes has been used to carry on the program. In these eight years we have spent about \$2500. This, in brief, is the way the program has been financed.

"The first bulletins issued to the medical profession were reprints from the Maryland Pharmacist which were 6" x 9". The second and third letterheads were used and the sheets were 8½ x 11 or 8¼ x 13". The first bulletin we sent out in the fourth year was a letter accompanied by 3" x 5" index cards. The response to this type of propaganda was so favorable that it has been continued from that date on. Our next step was to obtain a filing box and an index and reissue all cards. This was financed by retail pharmacists as suggested by the various physicians. At the present writing approximately 55% to 60% of the physicians in Maryland have these boxes in their offices.

"As you are seeking information it may be well to give you the general principles we have followed in preparing this box. The index tabs are wide and center-cut to permit the addition of future tabs. The titles on the cards are off center to permit ease in finding the reference without having to remove all the cards from the box. The decalomania on the outside of the box is a constant reminder to the physician to write prescriptions containing U. S. P. and N. F. items. Every card under each head carries a number so the physician can tell whether or not he has a complete set.

"We continue to send out additional cards and additional index tabs accompanied by a letter. These cards are on various subjects and we try not to have any duplicates, although we refer in our letters to other cards that are contained in the box."

Mr. Frederick D. Lascoff reports as follows on the activities in New York:

"Propaganda work in New York was started long before my time, and I do not know just how and where it began. Of course, I have been active in it for the past 25 years.

"I am sending you herewith a list of lectures started last year. I am also sending you the latest edition of the 'Revised Physician's Pocket Manual,' a compilation of U. S. P. and N. F. preparations, which are distributed gratis to physicians. Also enclosed is copy of my column which appears monthly in the *New York Physician*."

Dr. Lascoff's communication contains an excellent program of the Medical Society of the County of New York and the New York Pharmaceutical Society, the general topic of which was "Prescription Writing." From October 26th to March 28th the speakers included five physicians and six pharmacists. Your chairman wishes to commend the idea of a complete program on "Prescription Writing" and would recommend that other state committees consider the wisdom of a similar program. I am very sure that Mr. Lascoff will be glad to send copies of their program to any interested committee.

West Virginia's Active Program

Although West Virginia has had a professional relations program for less than four years, yet it has proved successful and worthy of attention. Mr. Charles V. Selby of Clarksburg describes its beginnings as follows:

"The development of a professional promotion program in West Virginia got its start in 1936 when one man had the courage to argue a County Retail Druggists Association into starting some sort of program to stop the flow of so many duplicating specialties across the prescription counter. After considerable argument the County group weakened and agreed to raise \$100 to do this work, which consisted of a letter twice a month to the doctors of the county telling them about some one item of either the U. S. P. or N. F. and a suggested prescription showing the use of these preparations. The result of this program is set forth in the report of the Professional Relations Committee of the W. Va. State Pharmaceutical Association in 1937.

"Following the report of the Professional Relations Committee in 1937 the convention was quite enthusiastic about carrying on a similar work on a state-wide basis and immediately raised the dues per member from \$3.00 a year to \$10.00 per year and the committee was instructed to start the program as soon as possible. The committee after due con-

sideration refused to start operations until at least enough funds were available to carry on the program for a six months' period.

"The program on a state-wide basis was finally put into operation in October of 1938 and carried on in the form of letters and cards 3 x 5 on which was printed some information regarding U. S. P. and N. F. preparations. Usually three cards were included with each letter and gave the name of some preparation, what its use was and the dose; these cards and letters were sent on the tenth and twenty-fifth of each month from October to June. The response from the medical profession was indeed gratifying.

"Starting October first or tenth of 1939, the same procedure was followed except that two suggested prescriptions were placed on each of the three cards and they were in the most part for things which had been on the original cards, but showed ways to prescribe them. This was carried on again until June 1, 1940. The doctors during the period of the second mailing did not show as much enthusiasm as during the first year, no doubt due to the fact that this material kept coming to them at regular intervals and they came to accept it as a part of the general scheme of things. However, the acceptance by the medical profession and their cooperation in the whole program was much better than that received from the pharmaceutical fraternity.

"In July of this year, 1940, the State Pharmaceutical Association passed a resolution at the request of its Professional Relations Committee to the effect that this was a problem of mutual interest to both medicine and pharmacy and that we felt more could be accomplished through the efforts of a joint committee representing the two professions. This resolution was sent to the W. Va. State Medical Association and their House of Delegates referred the matter to a Committee with instructions to act. That is how things stand at this time in W. Va."

Wisconsin Sponsors Group Meetings

Mr. Max Lemberger reports for Wisconsin as follows:

"We have been devoting most of our efforts to an educational program by including a series of articles in the *Wisconsin Druggist*, vocational school sponsorship of our circuit instructor, and furnishing speech outlines for service and social clubs, high school vocational program, and medical groups.

"We have divided our state into districts and have experimented in some of these districts as to what kind of program would be most agreeable. Letters have been mailed, and group meetings with the allied professions have been held.

"The most successful campaign has been conducted in Milwaukee County. Letters have been

mailed monthly to all members of the County Medical Society, also letters to Dental Society members. In the *Medical Times*, the official publication of the County Medical Society, thus far there have appeared five of a series of articles on prescription writing, ointment medication, vehicles, expectorants and iso-alcoholic elixir. The letters were used as an advance notice to the publication of these articles; at the same mailing of letters to physicians, every pharmacist member of the Milwaukee County Pharmacists Association received a letter calling his attention to the articles and advising him to familiarize himself with the subjects and preparations discussed.

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In Michigan, the Wayne County Medical Society has opened a membership classification for pharmacists which is unique in its approach to the pharmacy-medical relationship. Dean Roland T. Lakey of the Wayne University College of Pharmacy, Detroit, Mich., Secretary of the Pharmaceutical Associates of the Wayne County Medical Society, submits the following very interesting report on this development:

"During the early part of 1933, the Interprofessional Council was established in Wayne County. This organization was composed of representatives from each of the following professional groups: medicine, dentistry, law, nursing, education and pharmacy. Mr. L. A. Seltzer was elected chairman and the writer secretary. The first activity of this organization was to help the county medical society to draft a basic science law. This measure passed

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the legislature. We then formulated and secured the passage of a college graduation prerequisite for pharmacy. The pharmaceutical representatives developed the habit of meeting each Tuesday noon for luncheon at the Medical Society's club rooms. The friendly relations which we had established with our medical colleagues caused us to consider some way in which we might promote a more definite interest on their part in pharmaceutical service.

"Our analysis of the motives which were customarily displayed by pharmaceutical groups that had previously attempted to interest organized medicine in pharmacy revealed to us that the motive had always been the securing of more patronage on the part of the physician; or, in other words, the selfish purpose had always predominated. We finally concluded that the soundest approach to better relations between the two professions was the establishment of mutual confidence and the recognition that pharmaceutical practice is an essential accessory service to the practice of medicine. By creating, with the approval of the Council of the Medical Society, a special type of membership in the Medical Society itself, we hoped to accomplish the proper recognition.

Pharmaceutic Associates of Wayne County Medical Society

"It is our belief that the Pharmaceutic Associates differs from other organizations in the following respects: (1) It is not a new organization of pharmacists, but a special type of membership in the medical society itself. (2) Membership in the Pharmaceutic Associates group is voluntary and depends upon a pharmacist's abiding by rules and regulations embodied in a code of ethics which is administered by the Ethics Committee of the Medical Society. We have a special representative on this body who has the power to act in those cases which concern the pharmaceutical members. The main point of this individual type of organization is that, although it may be of small concern to the average pharmacist to be dismissed from any pharmaceutical society for not living up to its code of ethics, no "Pharmaceutic Associate" member, if he desires to maintain his prestige with the medical profession, would risk being expelled from the Medical Society, of which he is a member. (3) The standards for membership were made low enough at the start so that no great hardship would be worked on any pharmacist who has a sincere desire to practice his profession in its proper relation to public health. The Medical Society approved of all of the rules and regulations.

"The Pharmaceutic Associates group have carried on collective advertising in the columns of the *Detroit Medical News*. This advertising is confined to stating the principles upon which the organiza-

tion was founded and calling the attention of the medical profession to the place that pharmaceutical service should take in the practice of medicine. We have also held meetings where papers have been read and our medical friends have been invited to participate in the program."

Preserving Vulcanized Rubber Goods

Of interest to workers with vulcanized rubber articles is the following rubber preserving solution:

Glycerine.....	8 per cent
Alcohol.....	8 per cent
Water, to make...	100 per cent

According to Prinz's "Dental Formulary," this solution is one of the very few which has proved to be of any practical value for such purposes. Although this glycerine-alcohol-water mixture has no effect on deteriorated articles, new rubber goods are well preserved when immersed in it.

A newer, more complex mixture for preserving the suppleness and elasticity of rubber articles, patented abroad (Brit. Pat. 489,103 and French Pat. 818,466) is rather unique in that lemon juice is an important active ingredient. Glycerine, however, is the chief constituent of this mixture which is rubbed on the rubber surfaces or in which the rubber articles are steeped to obtain the preservative action. The ingredients consist of:

Glycerine.....	80 parts
Almond oil.....	4 parts
Lavender oil.....	4 parts
Sugar.....	4 parts
Petrolatum.....	3 parts
Lemon peel.....	2 parts
Lemon juice.....	3 parts

Chronica Botanica a European botanical magazine, first of its kind to "escape" from war-swept Europe and transplant itself to American soil, has issued its first number in Waltham, Mass. The editor, Dr. Frans Verdoorn, is a young botanist born in the Netherlands, who has had experience in the topics as well as in Europe and this country. He expects to maintain the international character of his journal by publishing articles not only in English but in Spanish, French, German and Italian.—*Science News Letter*.

A Philadelphia physician in 1807 had a pharmacist prepare carbonated water flavored with fruit juice, for patients.—*Science News Letter*.

Apple juice squeezed at the soda fountain is in prospect.

Pharmacy Week Observance Highly Successful

CHAIRMAN John O'Brien of the AMERICAN PHARMACEUTICAL ASSOCIATION Committee on National Pharmacy Week reports that pharmacists throughout the United States entered into the spirit of the observance of this week with greater enthusiasm than ever before. Thousands of window displays throughout the forty-eight states and the District of Columbia gave testimony to the keen interest of pharmacists everywhere in publicizing the professional activities of the drug store.

President Evans' Broadcast

President Charles H. Evans journeyed from his home in Warrenton, Georgia, to New York to speak over a coast to coast hook-up of the Red Network of the National Broadcasting Company from 7:00 to 7:15 P.M. on the evening of October 19th. "The value of the corner drug store," said President Evans in this opening message of Pharmacy Week, "reaches beyond the service it renders in a strictly pharmaceutical nature." "It has been truthfully said," continued Dr. Evans, "that public sentiment is crystallized in the drug stores of America. Here gather the people from all walks of life, from the smallest tot to the white-haired patriarch. The corner drug store is the meeting place of all the people. Open for longer hours than most places of business, it lends itself admirably as a civic center and information bureau. In times of war, pestilence and flood, regardless of what the conditions may be, your drug store arises to meet the emergency. History records that it has never failed. It never will, for it is more than the corner drug store, it is an American institution dedicated to the health and well-being of its people." He concluded his message to the people of America with the following sentence: "In fair weather or foul, during sickness or health, in the long hours of the day, or in the stillness of the night, your pharmacist stands ready to serve you and do his part in the preservation of the health and happiness of the greatest institution on earth—the American Home."

It would be difficult to single out the efforts of any particular state or section of the country as excelling other states or sections, but without any doubt the observance in the city of Washington was the most complete in view of the many facilities available for focusing public attention on the professional aspects of pharmacy which are available there.

Library of Congress Exhibit

An exhibition of books, prints and manuscripts, illustrating the history of pharmacy and the origins

of the United States Pharmacopoeia, was on display at The Library of Congress, during the week of October 20th.

In six cases in the Main Exhibit Hall was traced the history of pharmacy from the hieroglyphic writing of the Egyptians, the cuneiform script of the Babylonians—through the obscure symbolism of the medieval alchemists—to the modern sign language of the organic chemist.

The display began with a photograph of a Babylonian clay tablet, the original of which, dated 2600 years B.C., is in the University of Pennsylvania Museum. The inscription is a recipe for the treatment of a burnt foot.

From a facsimile edition of one of the most ancient of medical works, the *Ebers Papyrus*, found in an Egyptian mummy case many years ago and now in the University Museum of Leipzig, it was learned that over 700 drugs, including castor oil, were already known by 1550 B.C.

In another case early printed editions of the works of Hippocrates, the Father of Medicine, and Galen, the most famous physician of antiquity after Hippocrates, were on display.

Other works on display included a magnificent example of early printing, the "De Medicina" of A. Cornelius Celsus.

Dioscorides, the Father of Materia Medica, whose work dates from the first century (B.C.), was also represented in a new edition of his great herbal. The herbal literature, those great compilations of medicinally useful plants, was represented by early fifteenth and sixteenth century printed editions. On display were the "Hortus Sanitatus" of 1491, the "Natural History of Adam Lonitzer" of 1551 and the "Greate Herball" of John Gerald, 1597, one of the rarest of Elizabethan items.

The recently published facsimile edition of the "Badianus Manuscript," an Aztec herbal of 1552, the oldest medical book from the North American continent, the only existing copy of which is in the Vatican Library, was opened to display the gorgeous plant portraits. An interesting prescription in this early medical work has the title:

"Trees and flowers for the fatigue of those holding public office and administering the Government."

Of great interest were two Chinese herbals. One, recently acquired by the Library of Congress entitled "Ch'ung-hsiu Chêng-ho Ching-shih chêng lei pên-ts'ao" and printed in 1249 A.D. It contains what is probably the earliest known representation of the medicinal plant "Ma-huang," source of the well-known alkaloid *Ephedrine*.

The relation of chemistry to pharmacy was indicated in editions of the works of Paracelsus, Van Helmont, Stahl, Lavoisier and Priestley.

An unusual feature was a collection of reproductions of seven paintings representing "Christ, the Apothecary of the Soul."

In a succeeding group of cases was traced the history of *Pharmacopæias*. Of particular interest in connection with the origins of the United States Pharmacopœia, was a group of letters in the Manuscripts Division of the Library of Congress written by Dr. Lyman Spalding, founder of the United States Pharmacopœia.

The exhibit culminated in a display of recent textbooks used in pharmacy schools, and journals recording the latest results of medical and pharmaceutical research.

Other Washington Activities

Other exhibits were on display in the Headquarters Building of the AMERICAN PHARMACEUTICAL ASSOCIATION, the Smithsonian Institution, the Pan American Union, the Central Branch of the District of Columbia Public Library, the Department of Interior, the Department of Commerce lobby and in the Capitol Theatre lobby.

A dinner party at the Capitol Theatre on Monday evening, October 21st, arranged by the District of Columbia Pharmaceutical Association, brought many pharmacists and their friends to this building and helped to defray the expense of the extensive publicity arranged in behalf of Pharmacy Week.

A tour of the exhibits and pharmaceutical shrines under the auspices of the Women's Auxiliary of the District of Columbia Pharmaceutical Association starting at the AMERICAN INSTITUTE OF PHARMACY and concluding with the visit to the exhibit at the Library of Congress, was arranged for October 22nd.

Announcements of Pharmacy Week and Pharmacy Week activities were carried in posters on the Washington street cars and all drug delivery trucks. Twelve hospital pharmacies in the District of Columbia cooperated with the ASSOCIATION in displaying posters and exhibits pertinent to Pharmacy Week.

Radio addresses were made on each day of Pharmacy Week and the following participated in these broadcasts: Dr. Morris Goldstein, Dr. W. H. Whittlesey, Dr. Samuel Higger, Dr. A. C. Taylor, Dr. Harold Kinner and Dr. David L. Maxwell. Without doubt this was the most complete program arranged for any city and, of course, the facilities for its arrangement were unusual.

Ohio Proclamation

The Governor of Ohio, among others, issued a Pharmacy Week proclamation based on the all-important and vital service supplied by pharma-

cists which is necessary in alleviating pain and preserving health. The final paragraph of the proclamation read as follows:

Now, THEREFORE, I, John W. Brieker, Governor of Ohio, do hereby proclaim the week of October 20 to October 26, 1940, as Pharmacy Week in Ohio, and urge that all citizens of this State join with the Ohio State Pharmaceutical Association and the six thousand registered pharmacists in Ohio in accepting the true importance of this profession and the service it renders the human race."

Reports from Minnesota, New Hampshire, New Jersey and many other states have been received in the office of the AMERICAN PHARMACEUTICAL ASSOCIATION as well as in the office of Chairman O'Brien, indicating that the activity of practicing pharmacists, under the stimulation of their leaders, resulted in general public recognition of the importance of the professional phases of pharmaceutical practice to a greater extent than ever before. This is a tribute to the organizing ability of Chairman O'Brien and his committee as well as to the cooperating organizations and individuals.

For Killing Lice

Memorandum No. 230, issued by the Ministry of Health (H.M. Stationery Office, 2d.) gives the following information according to the *Pharmaceutical Journal*: The following repellents are advised: A paste of crude unwhizzed naphthalene 90 per cent with potash soap 10 per cent, melt and stir until cold; N. C. I. powder (naphthalene 96, creosote 2, iodoform 2); kerosene 3 with olive oil 7; cresol 1½ fl. oz., soft soap 1½ lb., water to 10 gallons. For head lice a mixture of kerosene and olive oil equal parts applied for about twelve hours, followed by a thorough washing with soap and water, is recommended. "Tar oil compound" is cottonseed oil 20, tar oil 5, kerosene 74 and oil of lemongrass 1. It is rubbed on to the scalp, after which the head is washed with a solution of soft soap 2 lb., borax 4 oz., in water to 1 gallon. For crabs lice calomel pomade, containing 1 part of calomel in 20 parts of soft paraffin, is suggested. Lice are killed by immersion for five minutes in an emulsion of 2 per cent cresol with 5 per cent soap.

Glue that has hardened can usually be restored to usable flexibility and softness by adding one part of glycerine to four parts of the glue. Glycerine is an important ingredient of many adhesive preparations, and when combined with glue, prevents hardening and also acts as a preservative to prevent spoilage.

The United States depends on Spain and Portugal for almost all of its cork, but California may start growing cork trees commercially.

Detroit in 1914 and Again in 1941

By ERNEST R. JONES

THE 1914 A. PH. A. convention held in Detroit in August of that year was one of the most successful up to that time and the committee in charge received many compliments for its splendid work. It would not be inappropriate to go back and reminisce a little on what took place at that time.

In a group photograph of the executive committee responsible for the success of that meeting we find Leonard A. Seltzer was Local Secretary and General Chairman. Chairmen of the other committees were: *Publicity*, H. B. Mason; *Hotels*, R. W. Rennie; *Entertainment*, O. W. Gorenflo; *Membership*, W. A. Hall; *Financial*, C. F. Mann; *Reception*, G. W. Stevens; *Transportation*, J. H. Webster; and *Traveler's*, F. W. Kerr.

Perhaps you wonder, as I did, what has happened to these men, and whether the fates have been kind to them. A lot can happen in twenty-six years, particularly when men are in middle life. It is with great sadness that we report H. B. Mason, W. A. Hall, C. F. Mann, J. H. Hackney, G. W. Stevens and F. W. Kerr as having passed to the eternal beyond.

Of the others, more joyful reports can be given. Leonard A. Seltzer and J. H. Webster are prominent national figures and have conducted stores at their present Detroit locations for years. Both are active members of the 1941 Convention Committee, Mr. Seltzer being chairman of the present Advisory Committee, and Mr. Webster a member of the Finance Committee. R. W. Rennie is in the insurance business and O. W. Gorenflo is assistant manager of a Cunningham store.

The headquarters hotel in 1914 was the Ponchartrain. This splendid hotel on Cadillac Square was razed during a later boom period to make room for the present National Bank Building.

Among the entertainment features provided twenty-six years ago was a trip through the plant of Parke, Davis & Company, followed by an afternoon and evening boat ride on the Steamer Britannia as guests of the company. The Grand Ball was held at the Ponchartrain. Nelson, Baker & Company provided an excursion to Bob-Lo for the ladies, and F. H. Thompson Company and F. F. Ingram Company sponsored a theatre party for the fair sex while Frederick Stearns & Company was entertaining the men at a "Smoker" and vaudeville performance.

President of the Association was Geo. M. Berlinger of Camden, New Jersey, who delivered a lengthy, and as was usual with him, a very valuable address.

A prominent figure at this convention was Jos. P. Remington, dean and professor of pharmacy at the Philadelphia College of Pharmacy and chairman of the U. S. P. Revision Committee—one of the truly great men of the period.

Chairmen were: H. B. Mason, *Commercial*; Hugh Craig, *Education and Legislation*; W. C. Alpers, *Historical*; F. W. Nitardy, *Practical Pharmacy*; E. F. Cook, *Pharmacopæias and Formularies*; and E. A. Ruddiman, *Scientific*.

Finally, I quote E. C. Marshall, acting editor of the JOURNAL OF THE A. PH. A. who wrote, "the convention was a distinct success in every particular. . . . The arrangements of the Local Committee were carried out in a manner beyond all praise."

The 1914 Committee has set a high standard for the 1941 Committee to follow. We shall not fail. It is not too early to plan for your visit to Detroit for the eighty-ninth annual meeting of the ASSOCIATION, August 17 to 23, 1941.

A Thought for To-day

"I was born an American; I live an American, I shall die an American; and I intend to perform the duties incumbent upon me, to that character, to the end of my career. I mean to do this with absolute disregard of personal consequences. What are personal consequences? What is the individual man, with all the good or evil that may betide him, in comparison with the good or evil which may befall a great country in a crisis like this, and in the midst of great transactions which concern that country's fate?

"Let the consequences be what they will, I am careless. No man can suffer too much, or no man fall too soon, if he fall in defense of liberties and the Constitution of his country."—DANIEL WEBSTER, July 1850.

Luck

According to Mac O'Rell, "Luck is of your own making. Luck means rising at six in the morning, living on \$2.00 a day if you get \$4.00, minding your own business, and not meddling with other people's. Luck means the hardships and privations which you have had to endure, the long nights you have devoted to work. Luck means the appointments you have never failed to keep, the trains you have not failed to get. Luck comes to those who help themselves and know how to wait."—*The Interstate*

Progress on the New Pharmacopoeia

By E. F. COOK

Chairman U. S. P. Revision Committee

Two meetings of the members of the Committee of Revision and the routine activities conducted through General Committee Circulars and Sub-Committee Bulletins have materially advanced the work of the Twelfth Revision during the past six months.

During the recent meeting of the Revision Committee last October, many of the suggestions offered during the Convention in May were discussed. Committee action was taken and each of the 15 sub-committees held conferences to consider the details of monographs in their hands for revision. The recommendations on scope are of special interest to physicians and pharmacists and these are presented for general information and criticism.

All who have suggestions which in their opinion might increase the value of the U. S. P. to the medical or pharmaceutical professions or to the public are urged to send such comments to the General Chairman of the Committee of Revision.

The Scope of the U. S. P.

At the request of the chairman of the U. S. P. Committee of Revision, Dr. C. W. Edmunds, president of the Pharmacopoeial Convention, and Dr. Walter A. Bastedo, chairman of the Sub-Committee on Scope, have outlined the policy under which medicinal substances and preparations have been admitted to the Pharmacopoeia. This is as follows:

"The Sub-Committee on Scope, which decides admissions and deletions for a new Pharmacopoeia, is primarily responsible for the value and usefulness of the book to the medical profession. The fundamental medical and pharmaceutical objectives of the Pharmacopoeia from the time it was established have been to include a selected list of the best known and most thoroughly tested medicines of each revision period and also suitable usage or dosage forms or preparations of these important basic medicines. It has always been the aim of those responsible for the Pharmacopoeia that it should be so comprehensive as to meet every need of medical practice, in so far as there are efficient medicinal products and medical aids known and available.

"This principle of Pharmacopoeial admissions has been maintained and practiced since 1820 and was emphatically reaffirmed by the Sub-Committee on Scope during the recent meeting of the Committee of Revision. When it is determined that a medicinal substance or preparation fails to meet the standard of therapeutic excellence or service re-

quired by the Revision Committee or when a patent situation intervenes, such a substance, or preparation, is denied admission to the Pharmacopoeia. This policy of the Pharmacopoeia of the United States is the basic policy for all Pharmacopoeias of the world. Under it is included any substance or preparation used in medicine which in the opinion of its experts is worthy of Pharmacopoeial recognition. Under this accepted policy, the Pharmacopoeia has been able to develop and maintain a unique voluntary service to medicine, pharmacy and the public, a contribution recognized and accepted by the medical and associated professions, and the manufacturing drug industry, and adopted by state and federal legislation."

Admissions and Deletions

Operating under this policy the list of articles so far proposed by the Sub-Committee on Scope for addition to the new Pharmacopoeia and also the list of articles now official but suggested for exclusion, or "deletion," from the U. S. P. XII are announced.

In addition to the "admissions" here listed, thirty or more substances have been recommended for inclusion in the U. S. P. XII, but because of trademark or patent involvements, the names of these are withheld until they have been given further study. Further recommendations of the Sub-Committee on Scope will be announced from time to time.

New Articles Recommended for the U. S. P. XII

Absorbent Gauze, Absorbent Gauze—Sterile, Adhesive Absorbent Compress, Antipneumococcus Serum (the new monograph to cover all types), Calaminae Preparata, Calcium Mandelate, Dextrose Solution (for injection 50 per cent), Dextrose (50 per cent) and Sodium Chloride (30 per cent) Solution (for injection), Elixir Cardamomii Compositum, Elixir Iso-Alcoholicum, Elixir Phenobarbitali, Elixir Terpini Hydratis, Ethyl Carbamate, Gas-gangrene Antitoxin (to include types now used), Gauze Bandage, Glycocoll (Amino Acetic Acid), Immune Serum for Scarlet Fever—Human, Immune Serum for Measles—Human, Immune Globulin (Placenta Extract)—Human, Lotio Calaminae, Lotio Calaminae Phenolata (2 per cent Phenol), Magnesium Trisilicate, Oleum Hippoglossi (Halibut), Ouabain, Picrotoxin, Picrotoxin Solution (for injection), Potassii Chloridum, Quinine Hydrochloride, Quinine Hydrochloride with Ethyl Carbamate Solution (for injection), Riboflavin,

Ringer's Solution, Serums, Dry and Liquid forms authorized for all U. S. P. Serums, Surgical Silk and other Surgical Sutures, Surgical Silk and other Surgical Sutures Sterilized, Syrupus Ammonii Mandelatis, Syrupus Glycyrrhizæ, Syrupus Rubi Idæi, Tabellæ Aminopyrinæ, Tetanus Toxoid, Tetrachloroethylene, Theobromine with Sodium Acetate, Totaquinine, Transfusion Normal Plasma Human, Transfusion Normal Serum—Human, Trichloroethylene, Urea, Vitamin A and D in Oil (Cod Liver Oil Strength) and Zinc Peroxide.

Articles to Be Deleted

Acetum Scillæ, Acidum Aceticum Dilutum—Acidum Acetylannicum, Acidum Sulfuricum Aromaticum, Aconitum, Albumini Tannas, Ammoni, Benzoas, Ammonii Bromidum, Ammonii Salicylas, Arseni Triiodidum, Asafœtida, Bismuthi Subgallas, Calcii Bromidum, Calcii Creosotas, Cannabis, Cantharis, Capsicum, Carbo Activatus, Carbomalum, Ceratum Cantharidis, Cinchona, Colchichi Semen, Copaiba, Creosoti Carbonas, Creosotum, Dichloramina-T, Emplastrum Cantharidis, Emulsum Asafœtidæ, Extractum Cannabis, Extractum Nucis Vomicae, Ferrum, Fluidextractum Belladonnae Radicis, Fluidextractum Cannabis, Galla, Guaiacol, Hydrargyri Iodidum Flavum, Iodoformum, Kino, Liquor Ammonii Acetatis, Liquor Ferri Chloridi, Liquor Ferri Tersulfatis, Magma Ferri Hydroxidi, Massa Hydrargyri, Merbaphenum, Mistura Opii et Glycyrrhizæ Composita, Oleum Santali, Pancreatinum, Paraffinum, Pepsinum, Pilocarpina Nitras, Pilulæ Aloes, Podophyllum, Potassii Chloras, Pulvis Ipecacuanhæ et Opii, Pulvis Sennæ Compositus, Pyrogallol, Quinina, Resina Podophylli, Santonium, Scilla, Serpentaria, Sodii Acetas, Spiritus Æthylis Nitritus, Spiritus Chloroformi, Strychnina Nitras, Sulfonethymethanum, Sulfur Lotum, Syrupus Ferri Iodidi, Syrupus Scillæ, Terebentum, Theobromina cum Sodii Salicylate, Tinctura Aconiti, Tinctura Cantharidis, Tinctura Capsici, Tinctura Cinchonæ Composita, Tinctura Colchici Seminis, Tinctura Ferri Chloridi, Tinctura Kino, Tinctura Scillæ, Tinctura Valerianæ, Tinctura Veratri Viridis, Unguentum Gallæ, Valeriana and Veratrum Viride.

Phenothiazine Insecticide Patent Donated to Public

L. E. Smith, a chemist of the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, has been granted a United States Patent (No. 2,127,566) covering the use of phenothiazine as an insecticide. This patent is dedicated to the free use of the public in the territory of the United States, which means that anyone can manufacture or sell phenothiazine for insecticidal purposes. Such manufacture and sale, however, is inadvisable, the Department says, until research now under way has ironed out existing difficulties in the commercial application of phenothiazine insecticides.

Laboratory and small-scale tests have proved that phenothiazine is toxic to several important crop insect pests, notably the codling moth which

costs the apple growers of this country about \$17,500,000 a year. An effective way of using it in commercial orchards, however, remains to be worked out.

Philadelphia College Seminar

Commencing Monday morning, January 27, 1941, and continuing through Monday afternoon and evening, Tuesday morning, afternoon and evening, and Wednesday morning and afternoon, the third Annual Seminar for pharmacy graduates will be held at the Philadelphia College of Pharmacy and Science. The program will include the following subjects:

- "The Newer Technical Formulas," by Dean Ivor Griffith.
- "Modern Methods of Drug Application," by Professor Linwood F. Tice.
- "The Pharmacist and the Pharmacy in Community Health Protection," by Dr. E. Fullerton Cook.
- "The Chemistry of Some of the Newer Drugs," by Dr. Arthur Osol.
- "The Therapeutics of Some of the Newer Drugs," by Dr. Horatio C. Wood.
- "Making Use of New U. S. P. and N. F. Drugs," by Professor Adley B. Nichols.
- "Approved Prescriptions of Modern Medical Practice," by Professor Harvey P. Frank.
- "Current Problems in Drug Store Management," by Dr. Paul C. Olsen.
- "The Biology of the Endocrines," by Dr. Marin S. Dunn.
- "Present Day Sources of Crude Drugs in the United States," by Professor William J. Stoneback.
- "The Newer Knowledge in Bacteriology," by Dr. Louis Gershenfeld.
- "Tomorrow's Pharmacy—Profitably Professional and Esteemed," by Dr. John N. McDonnell.

In addition, there will be a prescription forum conducted by Professor E. E. Leuallen. There will also be laboratory demonstrations in manufacturing pharmacy, biology and botany, microanalysis and synthetic organic chemistry, and avian embryo researches. Additional features will be interesting scientific motion pictures, round table discussions, and question and answer periods during which registrants may present for discussion their own specific problems. How the new Food, Drug and Cosmetic Act affects the pharmacist will also be discussed.

Graduate pharmacists who are interested in attending this seminar should communicate immediately with the Registrar of the Philadelphia College of Pharmacy and Science, 43rd Street, Kingsessing and Woodland Avenues, in Philadelphia, Pa. The fee of \$10 includes lunches, dinners, notebooks and other essential material.

Local and Student Branches

BALTIMORE.—On November 7th the first fall meeting was held, with an attendance of 125 or more. The program was well received and the social gathering afterward, provided by Dr. H. A. B. Dunning, was much appreciated.

Dr. D. Roy Sexton, gastroenterologist, and Dr. Daniel F. Lynch, dental surgeon, both of Washington, D. C., presented a symposium entitled, "Relationship of Dental and Oral Infections to Gastro-intestinal Disease," accompanied with slides showing photographic studies of these conditions.

Dr. Lynch opened the discussion with a series of slides in natural color of various dental and oral infections met with in his extensive practice as a dental surgeon. Dr. Sexton followed up this talk by exhibiting and explaining the gastroscope. His slides showed the interior of the stomach, the photographs having been obtained by use of the gastroscope and a specially devised camera. The progress of stomach ulcers and the early progress of cancerous growths were vividly shown.

The connection between certain oral infections and related conditions in the gastro-intestinal tract was brought out; and the fact that the pharmacist can contribute to the health of his customers by not allowing them to forget the toothbrush and tooth cleansing materials which he carries.

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The December meeting was held on the 5th with about 130 in attendance.

Miss Justina Hill, an associate in urology at the Johns Hopkins Hospital, was guest speaker. She discussed bacteriology as it is represented in her recent book, "Germs and the Man," which any pharmacist might read with profit. She attempted to set forth the history of original discoveries which led to the present development of this interesting field, and some of the more important aspects of bacterial life which are still baffling. It was brought out that the pharmaceutical chemist could be of assistance in the search for more knowledge regarding bacteria. A rising vote of thanks was accorded the speaker.

ROBERT S. FUQUA, *Secretary*

CHICAGO.—The 266th meeting of the Branch was voted a huge success by the 135 members and friends who assembled at the Palmer House on October 15th, at a banquet in honor of the new Dean of the University of Illinois College of Pharmacy, Dr. E. R. Serles, and his wife.

After an excellent dinner, President Lawrence Templeton presided over the program, beginning with a warm welcome extended to Dean and Mrs.

Serles on behalf of the Chicago Branch, followed by an introduction of the honored guests to the assembled group. Many personal greetings were extended, and Dean Serles then made response, which was followed by an inspiring message containing a résumé of the highlights on the history of pharmacy, the importance of pharmacy in the past and present, and the possibilities which pharmaceutical training opens to the student of to-day.

After the Dean's response, President Templeton presented a "Token of Good Wishes" in the form of a beautifully engraved leather "Memory Book" endorsed by all those present at the dinner and containing letters from friends and well-wishers unable to be present because of distance or previous engagements, as a gift of the Chicago Branch to Dean and Mrs. E. R. Serles.

Mrs. Serles then conveyed to the assemblage a few well-chosen words of appreciation and thanks on behalf of the Dean and herself.

The formal portion of the meeting was then closed and following the invitation extended earlier in the evening, all those present came up for personal introductions to Dean and Mrs. Serles after which followed a general social period.

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The 267th meeting of the Branch was held November 19th, at the University of Illinois College of Medicine Building. The seventy members and friends of the Branch present heard Mr. Edward Spease, Director of Professional Relations of the N. A. R. D. and former Dean of Western Reserve College of Pharmacy, present a discussion on "Inter-professional Relations."

After presenting to those assembled, the greetings of the N. A. R. D., Mr. Spease began his discussion with a talk on hospital pharmacy, telling of the work done in this department in Cleveland, including its division into various sub-departments as "medical needs," "professional stores," etc., making for a much greater efficiency in the management and actual operation of the hospital pharmacy.

Mr. Spease spoke somewhat of the history of hospital pharmacy mentioning the names of some of the men who played a role in its advance, including those of Mr. Wm. Gray and Mr. I. Becker, both prominent Chicago hospital pharmacists.

Mr. Spease then discussed what plans he had to date for the fostering of inter-professional relations between the pharmacist, the doctor and the dentist, as well as for the building of good-will between the pharmacist and the customer. Letters, cards and other matter presented to the physician and dentist by the pharmacist at intervals and stressing

one item of importance at a time were to be made available to them, and their use was stressed by the speaker.

A humorous strain was kept rampant throughout the entire discourse by the reading of several poems composed by the speaker as parodies of the old type patent medicine ads and the advertising material in the nostrums of two or three decades ago.

The interest shown by those present manifested itself by the lively discussion which followed, after which the meeting was formally adjourned with a rising vote of thanks to the speaker.

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The 268th meeting of the Branch was held December 10th, at the University of Illinois College of Medicine Building.

President Templeton opened the meeting with the appointment of a nominating committee, since the Chicago Branch officers are voted into office in January and take over duties at the April meeting.

The more than one hundred members, guests and friends present then heard a very interesting and educational discussion on the "Vitamin B Complex" by Dr. D. V. Frost of the Department of Pharmaceutical and Nutritional Research, Abbott Laboratories.

Dr. Frost discussed the B Complex, first in general, and then taking up each individual member in the order each was made available. Thus he touched upon the History of their discovery, then gave their composition, their role in metabolism and their experimental and therapeutic usage. Thiamin chloride, riboflavin, nicotinamide and nicotinic acid, pyridoxine and pantothenic acid were all thus discussed.

The speaker brought out the fact that, in his opinion, thiamin chloride was not to be considered of any greater importance as a vitamin than were other members of the B Complex.

Interest in the subject as covered by Dr. Frost was shown by the discussion which followed in which questions of varying nature were asked. A rising vote of thanks was extended to Dr. Frost for the educational and entertaining evening.

EDWARD E. VICHER, *Secretary*

CITY OF WASHINGTON.—The meeting was called to order on October 28th. Minutes of the preceding meeting were read and approved. The Treasurer's report was presented.

Dean Briggs introduced the speaker, Lt. Colonel A. W. Kenner, U. S. Army, who gave an interesting discussion of the pharmacist's place in the army, pointing out many things that the pharmacist is capable of doing and which he felt that the pharmacist would eventually do. He further stated that the Selective Service Law did not exempt any class of individuals from being called and that the

pharmacist would have to submit his data to the local draft boards for consideration for deferment of service. As yet there has been no action on what will be done with the pharmacist if called. As for the Medical Administrative Corps, the requirement that officers must have a degree in pharmacy is so recent, comparatively, that its development cannot be predicted.

A rising vote of thanks followed.

Additional remarks on military service were made by Dean Briggs; and Dr. Kelly suggested that the individual pharmacist need not be seriously disturbed about his business or position in civil life because the number of pharmacists in comparison with the total number of registrants was such that there was not much likelihood of very many being called.

Mr. Paul Reznick gave a report on the activities of the D. C. Pharmaceutical Association during Pharmacy Week. His committee did an excellent job in emphasizing the importance of the pharmacist, to the people of Washington.

Dr. Hazelton stated that the programs for the year would place emphasis upon the professional phase of pharmacy.

The attendance was better than usual, fifty-six being present, including several members of the Student Branch of George Washington University.

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On November 25th the meeting was called to order by President K. L. Kelly, with thirty-eight present. Minutes of the preceding meeting were read and approved. Lieut. Glenn K. Smith was appointed chairman of the membership committee, which is to cooperate with the parent organization in conducting a membership drive. He reported that the quota for the District of Columbia is twenty new members, and he asked that all members assist him. Several new members were signed up at the close of the meeting.

The president appointed Dean W. Paul Briggs as chairman of the Professional Relations Committee. This committee is to work in cooperation with a like committee of the District of Columbia Pharmaceutical Association.

L. G. GRAMLING, *Secretary*

LOYOLA UNIVERSITY STUDENT BRANCH.—The meeting was called to order on November 7th, by Mr. Hecker. After roll call the minutes of the last meeting were read and adopted.

A motion was passed which stated that whenever a meeting is called for the passage of By-Laws of the Student Branch, if ten members are present, they can act for the group.

Mr. Hecker asked all students to assist the disabled Veterans on November 9th by helping to sell forget-me-nots.

A report of the Membership Committee was given by Miss Valerie Armbruster and Miss Rose Mary Bertin. Mr. Alfred Trahan, chairman of the Current Affairs Committee, gave a very interesting account of the new happenings in the pharmaceutical world.

A motion picture on "Malaria" was then shown. It gave an account of the life cycle of the mosquito, the way in which the malarial germ is connected with the mosquito and the work the Public Health Service has done against malaria. The picture was supplemented by a talk made by Dr. Kellerher of Tulane University and Charity Hospital on the mosquito, malaria and its effects on the body.

Dean McCloskey thanked Dr. Kellerher for his splendid talk.

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The meeting on December 5th was called to order by President Hecker. A general meeting for the public was followed by a brief business meeting for members only. The chairmen of various committees made their reports.

Next on the program was a very interesting motion picture on Vitamins, entitled, "What Vitamins Do for Us." It gave very startling examples of the diseases which are caused by lack of vitamins. It also stated the two purposes of vitamins: to cure disease and to accomplish prevention of disease.

The picture was supplemented by a talk by Dr. C. Benton Burns, pediatrician, of Tulane University and Charity Hospital, who gave a very interesting and enjoyable talk about vitamins, particularly stressing Vitamin K. He listed the diseases caused by lack of vitamins as: night blindness for lack of A; pellagra, nervousness and lack of appetite for lack of B; and scurvy for lack of C. He said that D is a catalyst for calcium, that E is the antisterility vitamin and that K aids in coagulation.

The business meeting followed and President Hecker introduced Ralph Diaz, president of Theta Beta, of Loyola University, who told us of the interest that he and his group have in our Student Branch. Miss Anna Mae Liuzza gave a report of the Program Committee.

It was decided that December 10th be set aside for passage of By-Laws. President Hecker announced that A. Ph. A. dues must be paid not later than December 13th.

Minutes of the last meeting were then read and adopted. The roll call showed 24 members present.

PBBGY LOU BUTCHER, *Secretary*

MICHIGAN.—The October meeting was held at the Wayne County Medical Society Building, October 22, preceded by a luscious turkey dinner, attended by forty members and friends.

The minutes of the May meeting were read and approved. Communications from Mr. Wilbur L. Scoville, John Weisel and Otis Cook were read. Mr. Chase introduced the many new members who were attending their first meeting of the Branch, among them Dean Simon Benson, Ferris Institute, of Big Rapids, Mich. The meeting room was filled to capacity, nearly 125 members attending.

Mr. R. L. McCabe offered the following resolution and recommended its adoption: "Resolved, that an account be opened in the name of the Michigan Branch of the A. Ph. A. in the National Bank of Detroit, Joy Road and Grand River Branch, and that funds deposited in said account may be withdrawn upon a check, draft or note or order of this organization when signed by R. L. McCabe, Treasurer of the Michigan Branch of the A. Ph. A." Adopted.

President Walter M. Chase then introduced the speaker of the evening, Mr. W. L. Colwell, Abbott Laboratories, Chicago, Ill., who presented a most interesting program in the form of a moving picture in natural color entitled "The Story of Pentathol Sodium," a powerful and brief acting barbiturate used intravenously for anesthesia. It possesses distinct advantages over inhalation anesthetics in many types of operations. These were skillfully produced in natural color moving pictures.

A general discussion followed and the many questions of the assembly were answered to the complete satisfaction of all, by Mr. Colwell.

President Walter M. Chase called upon the secretary in the role of Chairman of the Detroit Convention Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION, who urged that Pharmacy in Michigan present a united front when the convention of the A. Ph. A. is held in Detroit, August 17-23, 1941. A large increase in membership is anticipated for 1941. Every member is asked to do his bit to bring the membership drive, headed by Chairman E. J. Meyer, to a successful conclusion; for only by a large membership can we demonstrate unity in pharmacy in Michigan.

Mr. H. A. K. Whitney, vice-president of the AMERICAN PHARMACEUTICAL ASSOCIATION, supported the chairman in his plea for additional members. He said, "No other association has done so much for pharmacy as the AMERICAN PHARMACEUTICAL ASSOCIATION, and the support of this organization is in the best interest of better professional pharmacy."

Pharmacists are reminded that joining at this time carries the membership through the Convention year, 1941.

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The November meeting was held in the Wayne County Medical Society Building, November 26th, preceded by dinner attended by more than forty

members and friends. It was called to order by President Walter M. Chase and despite the most wretched weather, the room was filled to overflowing.

Minutes of the previous meeting were read and approved. President Chase then introduced several new members of the Branch who were attending for the first time, including Mr. and Mrs. Otis F. Cook, secretary of the Michigan State Pharmaceutical Association.

Dean R. T. Lakey moved that the secretary send Dr. R. L. Swain greetings and felicitations of the Branch, on being awarded the Remington Medal. Motion was approved.

President Chase introduced Mr. Ray McCaughan, Eli Lilly Co., who presented a moving picture story on the use and action of "Ergotocin." This film depicted the standardization and administration of the new ergot principle ergotocin or ergonovin. Mr. McCaughan prefaced the picture with a short history on ergot which proved interesting as well as enlightening. He demonstrated the advance made in medical science in the administration of ergot, a drug that produced death in the early days of European history and now is used to prevent death when used by the skilled obstetrician.

Dr. Carl Curt Pfeiffer, Wayne University College of Medicine and Pharmacy, discussed the film and the use of ergonovin. He said the advantage of ergonovin over other ergot preparations is that it does not affect the pulse or blood pressure of the patient. Ergonovin, a hydro-alcoholic alkaloid of ergot, acts only upon the postpartum uterus. Other alkaloids increase blood pressure materially and often produce toxic effects.

Dr. Pfeiffer said there was a fertile field for the scientist at the present time to produce synthetic drugs, replacing drugs that are becoming unobtainable because of the European war.

A general discussion followed, in which many interesting factors pertaining to ergot were brought out.

President Chase called upon the secretary, as chairman of the convention committee, to address a few remarks to the assembly. Another appeal was made for a general increase in membership, that Michigan may display a united front when the convention of the AMERICAN PHARMACEUTICAL ASSOCIATION is held in Detroit in August 1941.

A rising vote of thanks was extended to Mr. McCaughan and Dr. Pfeiffer for the interesting evening, during which every pharmacist was impressed with the progress that has been made in the development of oxytoxic drugs.

BERNARD A. BIALK, *Secretary*

NEW YORK.—By invitation of the Kings County Pharmaceutical Association, the regular meeting of

the New York Branch was held at the Brooklyn College of Pharmacy on December 9th, with about one hundred members and guests present. Minutes of the November meeting were approved.

President Hauck expressed the thanks of the Branch to the Kings County Pharmaceutical Association for the privilege of holding the December meeting at the Brooklyn College of Pharmacy, and to Dean Schaefer for arranging the program.

Chairmen of the Committees made their reports.

Dr. Schaefer announced that the Remington Medal Dinner was a complete success but that accounts were not as yet closed and that a more complete report would be made later.

President Hauck appointed a nominating committee and directed them to report at the January meeting.

A silent tribute was paid to our departed past-president, Dr. Henry H. Rusby.

Dr. Hugo H. Schaefer presided over the Scientific Section which was a forum discussion on the new experience requirement of the New York State Pharmacy Law. After January 1, 1943, a year of practical experience will be required of each candidate for State Board License, this experience to be acquired after graduation from a college of pharmacy.

Mr. G. W. Mather, secretary of the New York State Board of Pharmacy, outlined the historical development of regulatory measures for pharmacists and pharmacies in New York State. He pointed out that the New York State Pharmaceutical Association has been instrumental in accomplishing all great reforms that have been made and that that association's activities had resulted in this new provision of the pharmacy law. He said that the Board of Pharmacy looked to the Association to show the way in preparing the rules and regulations for the new type of experience requirement.

Professor L. D. Fonda outlined what he thought should be some of the requirements for this post-graduation experience. Among these he suggested that the experience should be devoted to the professional rather than the business phases of the operation of a pharmacy; that the pharmacy in which this experience was to be gained should be one adequately equipped to give a well-balanced professional experience; that a set of regulations be devised which the pharmacy must live up to and listing specific duties that the candidate must perform during the internship. He also advocated the required reading of scientific, pharmaceutical and medical journals, and participation in the activities of the local pharmaceutical associations.

Mr. R. R. Gerstner, pharmacist, added that the program must be handled by the pharmacists (with adequate supervision by the State Board of Pharmacy) and not by the colleges of pharmacy; and also that provision must be made for adequate com-

pensation for the candidate during this year of required practical training.

Mr. Eugene Levinstein, student and clerk, who will be affected by the new regulation, stated his belief that it will be easier to learn the practical side of the pharmaceutical profession after the completion of the collegiate work than to acquire this knowledge simultaneously; and that it will tend to discourage those who enter upon the study of pharmacy because they think the course is short and easy. He also pointed out the fear of the candidate that advantage will be taken of him and that he will not receive adequate compensation during this time of compulsory training.

After prolonged discussion, a rising vote of thanks was accorded the speakers.

HORACE T. F. GIVENS, *Secretary*

PHILADELPHIA.—The regular monthly meeting was called to order on December 10th, at the School of Pharmacy of Temple University. Minutes of the November meeting were read and approved.

Chairman Leberknight introduced Dr. Justin Powers, director of the AMERICAN PHARMACEUTICAL ASSOCIATION Laboratory and chairman of the Committee on National Formulary.

Dr. Powers discussed the mutual value and the dependence of both the National Formulary and the AMERICAN PHARMACEUTICAL ASSOCIATION Laboratory on each other. The laboratory was established at the University of Illinois in 1936 and moved to Washington in July 1938. It develops and tests formulas for inclusion in the National Formulary. The director of the laboratory is responsible to the council of the AMERICAN PHARMACEUTICAL ASSOCIATION. He has the advisory service of a Committee on Laboratory. His staff consists of four pharmaceutical chemists and a secretary.

Dr. Powers explained it is now the plan of the Committee to revise the Formulary at five-year intervals and to issue interim supplements when necessary. Publicity is given to all proposed changes through the monthly bulletins and trade journals. This gives all interested people a chance to comment on proposed revisions and thus eliminates difficulties and weaknesses of the suggested revision before the change becomes official. Dr. Powers stated that the Committee appreciates these comments.

The speaker reviewed the development of the formula for Prepared Calamine, as well as the lotion and ointment in which it is used, and pointed out many of the difficulties that the revision committee experiences in the adoption of such modified or new formulas.

He next gave a brief history of the Elixir of B₁. A tentative formula has been released in the As-

sociation Bulletin. This may not become official in the N. F. VII as there is still much discussion regarding such phases as detannation of the wine, adjustment of p_H , tests for sulfites, etc. Should a formula be adopted, all manufacturers making an "Elixir of Thiamin" with a different formula would be in violation unless they stated how their formula differed from that in the N. F. He also discussed Syrup of Ammonium Mandelate, Pectin Pastes and other preparations which have recently been covered in the monthly N. F. Bulletin.

The meeting was opened to discussion and many interesting points were brought up, including such vital problems as precautionary labels and names for preparations. A rising vote of thanks was extended to the speaker.

R. H. BLYTHE, *Secretary*

THE UNIVERSITY OF MISSISSIPPI STUDENT BRANCH.—The first meeting was held Oct. 10th at the Pharmacy School. All new students were invited to attend and a special program arranged for them.

A summary of the history, objects and accomplishments of the A. Ph. A. was given by Angus McBride, after which Burrel Tutor gave a short talk on "What Active Membership Offers."

A dinner in the Student Union Building for old and new members was planned with a tentative date set.

MARGUERITE HOLMES, *Secretary*

SOUTHERN COLLEGE OF PHARMACY STUDENT BRANCH.—November 6th was really a red letter day for the Southern College of Pharmacy Student Branch of the A. Ph. A. This was the day on which Mr. Charles Evans, President of the A. Ph. A., was guest of honor at a luncheon held in the Peachtree room of the Henry Grady Hotel, with forty-odd Members attending.

The high light of the luncheon was, of course, Mr. Evans' address. He said that in promoting the profession of pharmacy we must not start at the top and go down but begin at the bottom and go up. In other words, we must start with the corner drug store, which is the only contact with pharmacy that the average person has. Therefore, the public as a whole will judge pharmacy by what they see and hear in the corner drug store.

In addition to this, Mr. Evans stated that we must sell pharmacy by magazine, radio and through our Student Branch as well as our parent organization; that we must not think we are through when we have finished school but we are just beginning. He then commended the trend toward "refresher" courses for druggists which are becoming so popular.

Mr. Evans encouraged us by saying that within ten years he predicted a big advancement for phar-

macy with shorter hours, higher salaries and fewer but better drug stores. He said, "As sure as there is a sun in heaven there are better times ahead for pharmacy."

Besides Mr. Evans a few other men prominent in the pharmaceutical world, who are friends of our school, were present: R. D. Rainey, Editor of the *Southeastern Drug Journal*; J. L. Hawk, Chairman of the Board of Trustees of our School; and Joseph M. Bransky, Federal Narcotic Agent.

ANNETTE WILLIAMS, *Secretary*

* * * * *

Our Branch raised \$40 to cover the showing of a series of audio-visual films of a scientific nature. The films are open to the entire student body and are shown from 10:00 to 11:00 o'clock on Friday morning. Our school is extremely fortunate in that on the first floor of the building there is a completely equipped projection room of the finest sort which will seat about 75 people.

During December the following pictures were shown: Cancer, Its Cure and Prevention; Colloids; The Endocrine Glands; Ethyl Alcohol, Its Nature and Properties; and The Wonder World of Chemistry.

Following the showing of the pictures on December 20th, members of the Branch were asked to remain for a business meeting at which plans for Branch activities for the winter quarter were discussed and January 10th was set as the deadline for the payment of dues for 1941.

EVELYN PEACOCK, *Secretary*

STATE COLLEGE OF WASHINGTON STUDENT BRANCH.—The monthly meeting was called to order on October 23rd by President Honodel, who introduced Mr. Ray Felt and Mr. Longpre of E. R. Squibb & Sons. The former is the Spokane representative of the company while the latter is professional service manager of the Northwest.

Mr. Felt gave a synopsis of the development of the company starting 90 years ago when Dr. Edward R. Squibb, a navy physician, set about to purify drugs which he discovered gave better results. He first established governmental laboratories and later his own. Dr. Squibb did most of the final research work on ether, credit being given him even in our modern textbooks.

An instructive talking film was shown which called attention to the fact that the vitamin business in this country increased from \$500,000 in 1933 to \$75,000,000 in 1939. The film showed the uses of the more common vitamins.

Mr. Honodel then introduced Mr. A. J. Longpre who gave a brief talk to the students on a few of the Squibb vitamin products, comparing them with such common substances as cod liver oil, oranges, yeast, etc., and explained that by making the prepa-

rations more palatable, the vitamin field has increased to what it is to-day. Thanks were extended for the interesting talks.

* * * * *

On December 4th the meeting was called to order by President Honodel, who introduced Mr. Victor Johnson, representative of Parke, Davis & Co. He then presented Mr. Eugene Endslo of G. D. Searle & Co., who gave a brief history of the company, and then discussed the newer method of treating gall-bladder disorders by the use of oxidized bile salts and a fat, rich diet. He showed the chemical relationships of the various bile salts and their derivatives.

In order to show the members how detail men work, Mr. Victor Johnson acted the part of a doctor, and Mr. Endslo the drug representative. The presentation was both entertaining and enlightening.

HAAKON BANG, *Secretary*

Montreal is expected to take over the position of world's perfume center, relinquished by Paris with the German invasion. At the present time Montreal has on hand about a year's supply of some of the famous perfumes. These purchases were made because a shortage of supply was feared by business heads here, well in advance of the German invasion of France.

Sulfanilamide dustings, which have been used for burns and cuts for some time, have been recommended by the British Medical Association for use, along with urea, in treatment of war wounds. Research in Great Britain has recently established that urea, a cheaply made chemical, is reported to be as effective in treating wounds as allantoin, an expensive preparation of which urea is a principal constituent.

Eighteen State Pharmaceutical Associations have informed the American Social Hygiene Association that they are ready to cooperate in the national campaign to stamp out venereal disease. The Joint Committee of the AMERICAN PHARMACEUTICAL ASSOCIATION and American Social Hygiene Association has held two meetings and is perfecting plans for more complete cooperative efforts in the national program to control venereal disease.

It is reported that Norway is making good progress in the production of cod liver oil in spite of the difficulties encountered during the past year.

Casein from about thirty quarts of milk is needed to make the synthetic wool for a dress.

AROUND THE STATES

ARIZONA

At its annual convention in Phoenix on November 17th, 18th and 19th the Arizona Pharmaceutical Association decided to take no action on the question of shorter hours for clerks. It was also decided not to introduce a revised pharmacy law for passage by the legislature at this time. A resolution was passed condemning the alleged attack on the pharmacists of the United States contained in a syndicated newspaper article entitled "Superstition and Health" by Dr. Morris Fishbein, editor of the *Journal of the American Medical Association* and *Hygeia*.

LOUISIANA

A military general hospital will be organized at Louisiana State University Medical Center in compliance with a request from the office of the Surgeon General, U. S. Army, Washington, D. C.

MARYLAND

The AMERICAN INSTITUTE OF PHARMACY was visited on December 13th by the following students of the College of Pharmacy of the University of Maryland: George De Gele, Alvin Fainberg, Leroy Keagle, Leon Goodman, Samuel H. Ginsberg, Albert Lindenbaum, Irvin Noveck, Oscar Rudoff, Irving F. Zerwitz, A. E. Glaser, Reuben Kahn, Kenneth Spangler, George Kreis, J. M. Jernigan, Francis Codd, Walter Hendin, Milton Sarubin, Manuel Miller, Bernard Rosenthal, Harold Siegel and Miss Georgianna Gittinger, with Dr. C. W. Chapman and Dr. M. J. Andrews in charge.

NEW JERSEY

A Mid-Winter Convention and Banquet of the New Jersey Pharmaceutical Association will be held at the Stacy-Trent Hotel, Trenton, N. J., Wednesday, January 29, 1941.

There will be business sessions, morning and afternoon. The morning session will begin promptly at 10:00 o'clock. There will be a recess for luncheon and the afternoon session will begin at 2:00.

The Frank O. Cole Trophy and the Frederick B. Kilmer Prize will be presented at this mid-winter meeting. In the evening, there will be a banquet and dance.

To train weather experts, important to national defense, the University of California has established a new division of meteorology.

Attempts to Dominate Quinine Industry

Since the invasion of Holland on May 10th, there have been persistent rumors of Nazi attempts to interfere with the Dutch quinine industry. According to Norman Taylor, director, Cinchona Products Institute, Inc., the actual facts appear to warrant the following statement:

"Heretofore Amsterdam has been the headquarters of an industry which has assured the supply of this world-wide remedy for malaria. By Royal Decree the management of this quinine industry was transferred to Bandoeng, Java, on May 14, 1940.

"We have been warned, although the warning was scarcely necessary, to have no communication with our former associates in Amsterdam for fear such correspondence might be diverted to Nazi ends.

"Java is now the center of the world's quinine industry, where ample production is assured of both cinchona bark and manufactured quinine. The latter is produced at the Bandoengsche Kininefabriek, the largest quinine factory in existence. There is thus no danger of a quinine shortage anywhere in the world. Of equal importance to Americans is the assurance that their need of this malaria remedy is absolutely removed from Nazi domination.

"The quinine industry, now centralized in the Netherlands East Indies, is completely Dutch and completely determined that Holland's plight shall not be turned to Nazi advantage. That attitude also actuates those connected either with the sale of Dutch quinine here or with the research and educational program of that industry."

Alkyd Resin for Enteric Coating

One of the newest and perhaps most unusual applications for a glycerine-containing alkyd-type resin is its employment for making enteric coatings for pills, capsules, tablets and the like. In preparing these coatings, according to the patent specifications (U. S. 2,205,111), use is made of a stearic acid-phthalate acid-glycerine condensation product.

Ink for Writing on Brass

An ink for writing on brass that should have many uses about the factory and laboratory, can be made as follows:

Rub 2 oz. of copper carbonate with a little water and add sufficient solution of ammonia (10%) to dissolve, then add 10 per cent of glycerine.

Raisin seed oil finds a use in soap production.

OBITUARY

Dr. Hans Heger

Dr. Hans Heger, honorary member of the AMERICAN PHARMACEUTICAL ASSOCIATION, was born in Troppau, Austria, September 7, 1855, and died in Vienna, some weeks ago, aged 85. He was the oldest living representative of liberal pharmaceutical journalism in Europe and of European international solidarity in the field of pharmacy. His ideals were quite similar to those of the American people.

Dr. Heger graduated from the University of Vienna in 1876, continued his education at École Supérieure de Pharmacie in Paris and graduated from the University of Heidelberg in 1881 with the Doctor's degree, "summa cum laude."

January 1, 1883, Dr. Heger purchased the *Pharmazeutische Post*, but one paper could not satisfy his manifold scientific ambitions so he founded the *Journal of Food-examination and Hygiene* and the *Journal of Austrian Chemists*; the latter became the official organ of the Association of Austrian Chemists. Following the first World War he founded a fourth journal, *Pharmazeutische Monatshefte*, devoted to scientific surveys and abstracts, reports on pharmaceutical meetings and the history of pharmacy. He opened his four journals to everyone who had something to say; he became one of the greatest representatives and the revered symbol of liberal pharmaceutical journalism in continental Europe.

Not only did Dr. Heger write for his journals but he also published many important books bearing on "New Remedies," "Social Welfare," "Pictures of Pharmacies," "Prescription Formularies," "Encyclopædia of Pharmacy," and "Austria's Big Industry." Between his journals and his books there was scarcely one field of scientific, ethical or practical importance within pharmacy which the journalist Heger overlooked or failed to promote. He lived in Austria but his spirit comprehended and his heart embraced the world.

The first three International Pharmaceutical Exhibitions in Vienna were almost exclusively the work of Dr. Heger. In 1885 he took part in the Sixth International Congress in Brussels, and in 1937, at the age of 82, he attended the Tenth General Assembly of the International Pharmaceutical Federation in Copenhagen as one of the most interested and interesting speakers.

Dr. Heger was honored by pharmaceutical associations, reigning princes and governments throughout the world. It was at the meeting of the A. PH. A. in Toronto, in 1932, that he was elected an

Honorary Member, together with Dr. George Ur-dang (then editor of the *Pharmazeutische Zeitung* in Berlin), whom we wish to thank for this brief memorial to a truly great man.

Oswald E. Albl

Oswald E. Albl, of Cleveland, Ohio, passed away on November 19th, aged 63 years. Mr. Albl was born near Broadway and E. 55th St., in Cleveland, and took a leading part in the development of his vicinity. He operated a drug store at 4821 Broadway for forty years, with his brother Frank E., under the name of "Albl Brothers." His was the first drug store in the neighborhood.

Mr. Albl was a 32nd degree Mason, a member of Knights of Pythias, member of Al Koran Shrine and Al Sirat Grotto, and was active in the Czech organization, Sokol Cech Havlicek. He had been a member of the AMERICAN PHARMACEUTICAL ASSOCIATION since 1922. Four brothers and six nieces and nephews survive.

M. W. Friedenburg

Mr. M. W. Friedenburg, formerly of Winfield, Kansas, but for the past few years of Long Beach, California, died November 16th, in his 70th year.

Mr. Friedenburg was born in Atchison and moved to Winfield in 1900, where he was engaged in the drug business for 35 years.

He was a member of the Kansas Pharmaceutical Association and had served as a member of the Board of Pharmacy. He was a Life Member of the AMERICAN PHARMACEUTICAL ASSOCIATION, a past member of the Winfield Rotary Club, member of the A. O. U. W., Fraternal Aid, Modern Woodmen and Elks Lodges.

Mr. and Mrs. Friedenburg were married March 15, 1891, and were looking forward to their golden anniversary next March.

Besides his wife, who was with him in California, Mr. Friedenburg is survived by his daughter, Louise, and by his grandson, Max Rogers.

War is making home production of all types of herbs, drugs and oils more important, according to the *Canadian Pharmaceutical Journal*. Every dollar's worth of material produced in Canada means a saving to Canadian consumers. Due to the stimulus of war, peppermint is being grown in Ontario very successfully.

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Editors

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ROBERT P. FISCHER

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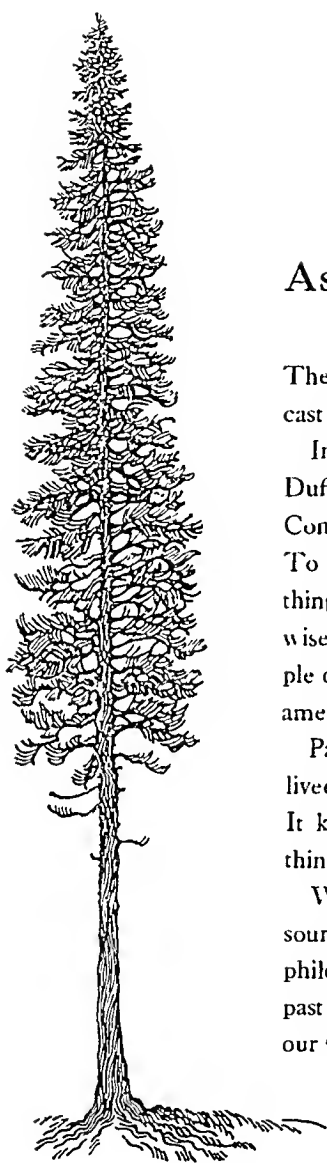
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